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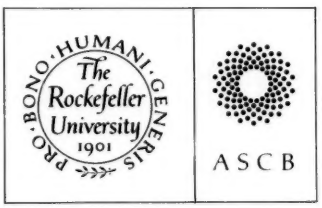

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Altieri, D. C., Bader, R., Mannucci, P.M., and Edgington, T. S. Oligospecificity of the cellular adhesion receptor MAC-1 encompasses an inducible recognition specificity for fibrinogen. 107:1893.
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Amagai, Y. *See* Sudo, Kodama, Amagai, Yamamoto, and Kasai.
Amar-Costesec, A. Analytical study of microsomes and isolated subcellular membranes from rat liver. VII. Distribution of protein-bound sialic acid. 89:62.
—, **Prado-Figueroa, M., Beaufay, H., Nagelkerke, J. F., and van Berkel, T. J. C.** Analytical study of microsomes and isolated subcellular membranes from rat liver. IX. Nicotinamide adenine dinucleotide glycohydrolase: a plasma membrane enzyme prominently found in Kupffer cells. 100:189.
—, **Todd, J. A., and Kreibich, G.** Segregation of the polypeptide translocation apparatus to regions of the endoplasmic reticulum containing ribophorins and ribosomes. I. Functional tests on rat liver microsomal subfractions. 99:2247.
— *See* Marcantonio, Amar-Costesec, and Kreibich.
— *See* Ravoet, Amar-Costesec, Godelaine, and Beaufay.
— *See* Wibo, Thines-Sempoux, Amar-Costesec, Beaufay, and Godclaine.
Amara, J. F., Lederkremer, G., and Lodish, H. F. Intracellular degradation of unassembled asialoglycoprotein receptor subunits: a pre-Golgi, nonlysosomal endoproteolytic cleavage. 109:3315.
Amato, P. A., and Taylor, D. L. Probing the mechanism of incorporation of fluorescently labeled actin into stress fibers. 102:1074.
—, **Unanue, E. R., and Taylor, D. L.** Distribution of actin in spreading macrophages: a comparative study on living and fixed cells. 96:750.
Amaya, E. *See* Bloom, Amaya, Carbon, Clarke, Hill, and Yeh.
— *See* Kenna, Amaya, and Bloom.
Ambrosini, A. *See* Vicentini, Ambrosini, Di Virgilio, Pozzan, and Meldolesi.
Amchenkova, A. A., Bakeeva, L. E., Chentsov, Y. S., Skulachev, V. P., and Zorov, D. B. Coupling membranes as energy-transmitting cables. I. Filamentous mitochondria in fibroblasts and mitochondrial clusters in cardiomyocytes. 107:481.
Amende, L. M. *See* Heuser, Keen, Amende, Lippoldt, and Prasad.
Amenta, P. S., Clark, C. C., and Martinez-Hernandez, A. Deposition of fibronectin and laminin in the basement membrane of the rat parietal yolk sac immunohistochemical and biosynthetic studies. 96:104.
— *See* Haverty, Kelly, Hines, Amenta, Watanabe, Harper, Kefalides, and Neilson.
Amerongen, H. M., Mack, J. A., Wilson, J. M., and Neutra, M. R. Membrane domains of intestinal epithelial cells: distribution of Na^+, K^+-ATPase and the membrane skeleton in adult rat intestine during fetal development and after epithelial isolation. 109:2129.
Amherdt, M. *See* Montesano, Mouron, Amherdt, and Orci.
— *See* Orci, Halban, Amherdt, Ravazzola, Vassalli, and Perrelet.
— *See* Orci, Ravazzola, Amherdt, Madsen, Perrelet, Vassalli, and Anderson.
— *See* Orci, Ravazzola, Amherdt, Yanaihara, Yanaihara, Halban, Renold, and Perrelet.
Ammerer, G. *See* Bernstein, Hoffmann, Ammerer, and Schekman.
Amos, L. A. *See* Linck, Amos, and Amos.
Amos, W. B. *See* Linck, Amos, and Amos.
— *See* White, Amos, and Fordham.
Amrani, D. L. *See* Tooney, Mosesson, Amrani, Hainfield, and Wall.
Amrein, P. C. *See* Niederman, Amrein, and Hartwig.
Anderson, C. L. *See* Jones, Nusbacher, and Anderson.
Anderson, D. C. *See* Gresham, Goodwin, Allen, Anderson, and Brown.
Anderson, D. J., Walter, P., and Blobel, G. Signal recognition protein is required for the integration of acetylcholine receptor δ subunit, a transmembrane glycoprotein, into the endoplasmic reticulum membrane. 93:501.
— *See* Hertzberg, Anderson, Friedlander, and Gilula.
Anderson, J. *See* Garcia, Coudrier, Carboni, Anderson, Vandekerkhove, Mooseker, Louvard, and Arpin.
Anderson, J. C. *See* Klein, Brown, Oegema, Brenchley, Anderson, Dickerson, Horigan, and Hassell.
Anderson, J. M., Stevenson, B. R., Jesaitis, L. A., Goodenough, D. A., and Mooseker, M. S. Characterization of ZO-1, a protein component of the tight junction from mouse liver and Madin-Darby canine kidney. 106:1141.
—, **Van Itallie, C. M., Peterson, M. D., Stevenson, B. R., Carew, E. A., and Mooseker, M. S.** ZO-1 mRNA and protein expression during tight junction assembly in Caco-2 cells. 109:1047.
— *See* Stevenson, Anderson, Goodenough, and Mooseker.
— *See* Tyler, Anderson, and Branton.
Anderson, L. K. *See* Fox, Boyles, Berndt, Steffen, and Anderson.
Anderson, M. J. Nerve-induced remodeling of muscle basal lamina during synaptogenesis. 102:863.
—, **and Fambrough, D. M.** Aggregates of acetylcholine receptors are associated with plaques of a basal lamina heparan sulfate proteoglycan on the surface of skeletal muscle fibers. 97:1396.
—, **Klier, F. G., and Tanguay, K. E.** Acetylcholine receptor aggregation parallels the deposition of a basal lamina proteoglycan during development of the neuromuscular junction. 99:1769.
— *See* Bayne, Anderson, and Fambough.
Anderson, R. A. *See* Lovrien and Anderson.
Anderson, R. E., and Hollyfield, J. G. Inositol incorporation into phosphoinositides in retinal horizontal cells of *Xenopus laevis*: enhancement by acetylcholine, inhibition by glycine. 99:686.
Anderson, R. G. W., Brown, M. S., Beisiegel, U., and Goldstein, J. L. Surface distribution and recycling of the low density lipoprotein receptor as visualized with antireceptor antibodies. 93:523.
—, **Brown, M.S., and Goldstein, J. L.** Inefficient internalization of receptor-bound low density lipoprotein in human carcinoma A-431 cells. 88:441.
—, **and Orci, L.** A view of acidic intracellular compartments. 106:539.
— *See* Carpentier, Gorden, Anderson, Goldstein, Brown, Cohen, and Orci.
— *See* Heuser and Anderson.
— *See* Jingami, Brown, Goldstein, Anderson, and Luskey.
— *See* Larkin, Donzell, and Anderson.
— *See* Mahaffey, Moore, Brodsky, and Anderson.
— *See* McGookey and Anderson.
— *See* McGookey, Fagerberg, and Anderson.
— *See* Orci, Ravazzola, Amherdt, Madsen, Perrelet, Vassalli, and Anderson.
— *See* Pathak, Luskey, and Anderson.
— *See* Pathak, Merkle, Cummings, Goldstein, Brown, and Anderson.
— *See* Schneider, Slaughter, Goldstein, Anderson, Capra, and Brown.
Andersson, K., Björkroth, B., and Dancholt, B. Packing of a specific gene into discrete higher order structures following repression of RNA synthesis. 98:1296.

Andersson, T. *See* Särndahl, Lindroth, Bengtsson, Fällman, Gustavsson, Stendahl, and Andersson.
André, E., Brink, M., Gerisch, G., Isenberg, G., Noegel, A., Schleicher, M., Segall, J. E., and Wallraff, E. A *Dictyostelium* mutant deficient in severin, an F-actin fragmenting protein, shows normal motility and chemotaxis. 108:985.
Andreadis, A. *See* Taubman, Smith Izumo, Grant, Endo, Andreadis, and Nadal-Ginard.
Andreasen, P. *See* Pöllänen, Saksela, Salonen, Andreasen, Nielsen, Danø, and Vaheri.
Andreasen, P. A. *See* Laiho, Saksela, Andreasen, and Keski-Oja.
Andreassen, R. *See* Haugli, Andreassen, and Funderud.
Andres, J. L., Stanley, K., Cheifetz, S., and Massagué, J. Membrane-anchored and soluble forms of betaglycan, a polymorphic proteoglycan that binds transforming growth factor-β. 109:3137.
Andresen, P. B. *See* Kristensen, Nielsen, Grøndahl-Hansen, Andresen, Larsson, and Danø.
— *See* Skriver, Larsson, Kielberg, Nielsen, Andresen, Kristensen, and Danø.
Andre-Schwartz, J. *See* Klempner, Mikkelsen, Corfman, and Andre-Schwartz.
Andrews, B. S. *See* Palmer, O'Day, Wener, Andrews, and Margolis.
Andrews, D. W., Lauffer, L., Walter, P., and Lingappa, V. R. Evidence for a two-step mechanism involved in assembly of functional signal recognition particle receptor. 108:797.
Andrews, G. *See* Grover, Andrews, and Adamson.
Andrews, L. D., and Cohen, A. I. Freeze-fracture studies of photoreceptor membranes: new observations bearing upon the distribution of cholesterol. 97:749.
Andrews, M. L. *See* Nelson, Andrews, and Karnovsky.
— *See* Nelson, Andrews, and Karnovsky.
Andrews, N. W. *See* Bangs, Andrews, Hart, and Englund.
Andrews, P. C. *See* Noe, Andrews, Dixon, and Spiess.
Andrews, S. B., Mazurkiewicz, J. E., and Kirk, R. G. The distribution of intracellular ions in the avian salt gland. 96:1389.
— *See* Trapp, Andrews, Cootauco, and Quarles.
Andrieux, A. *See* Tranqui, Andrieux, Hudry-Clergeon, Ryckewaert, Soyez, Chapel, Ginsberg, Plow, and Marguerie.
Angelides, K. J., Elmer, L. W., Loftus, D., and Elson, E. Distribution and lateral mobility of voltage-dependent sodium channels in neurons. 106:1911.
—, **Smith K. E., and Takeda, M.** Assembly and exchange of intermediate filament proteins of neurons: neurofilaments are dynamic structures. 108:1495.
Angelier, N. *See* Moreau, Angelier, Bonnanfant-Jais, Gounon, and Kubisz.
Angello, J. *See* Sage, Vernon, Funk, Everitt, and Angello.
Angerer, L. M. *See* Nash, Kozak, Angerer, Angerer, Schatten, Schatten, and Marzluff.
Angerer, R. C. *See* Nash, Kozak, Angerer, Angerer, Schatten, Schatten, and Marzluff.
Anglister, L., and McMahan, U. J. Basal lamina directs acetylcholinesterase accumulation at synaptic sites in regenerating muscle. 101:735.
Angres, B. *See* Stick, Angres, Lehner, and Nigg.
Ankenbauer, T., Kleinschmidt, J. A., Vanderkerckhove, J., and Franke, W. W. Proteins regulating actin assembly in oogenesis and early embryogenesis of *Xenopus laevis*: gelsolin is the major cytoplasmic actin-binding protein. 107:1489.
Ansorge, W. *See* Rosa, Weiss, Pepperkok, Ansorge, Niehrs, Stelzer, and Huttner.
Antakly, T., Pelletier, G., Zeytinoglu, F., and Labrie, F. Changes of cell morphology and prolactin secretion induced by 2-Br-α-ergocryptine, estradiol, and thyrotropin-releasing hormone in rat anterior pituitary cells in culture. 86:377.
Anthony, D. T., Jacobs-Cohen, R. J., Marazzi, G., and Rubin, L. L. A molecular defect in virally transformed muscle cells that cannot cluster acetylcholine receptors. 106:1713.
Antin, P. B., Forry-Schaudies, S., Friedman, T. M., Tapscott, S. J., and Holtzer, H. Taxol induces postmitotic myoblasts to assemble interdigitating microtubule-myosin arrays that exclude actin filaments. 90:300.
—, **Tokunaka, S., Nachmias, V. T., and Holtzer, H.** Role of stress fiber-like structures in assembling nascent myofibrils in myosheets recovering from exposure to ethyl methanesulfonate. 102:1464.
— *See* Dlugosz, Antin, Nachmias, and Holtzer.
— *See* Mar, Antin, Cooper, and Ordahl.
Antoine, J.-C. *See* Goud and Antoine.
Antonicek, H., Persohn, E., and Schachner, M. Biochemical and functional characterization of a novel neuron-glia adhesion molecule that is involved in neuronal migration. 104:1587.
Antonov, A. S. *See* Shirinsky, Antonov, Birukov, Sobolevsky, Romanov, Kabaeva, Antonova, and Smirnov.
Antonova, G. N. *See* Shirinsky, Antonov, Birukov, Sobolevsky, Romanov, Kabaeva, Antonova, and Smirnov.
Antony, C. *See* Bacallao, Antony, Dotti, Karsenti, Stelzer, and Simons.
Aoyama, H. *See* Boucat, Darribère, Poole, Aoyama, Yamada, and Thiery.
Apatoff, B. R. *See* Gurney, Apatoff, and Heinrich.
Apgar, J. R., Herrmann, S. H., Robinson, J. M., and Mescher, M. F. Triton X-100 extraction of P815 tumor cells: evidence for a plasma membrane skeleton structure. 100:1369.
—, **and Mescher, M. F.** Agorins: major structural proteins of the plasma membrane skeleton of P815 tumor cells. 103:351.
Aponte, G. W. *See* Haffar, Aponte, Bravo, John, Hess, and Firestone.
Appel, S. H. *See* Bursztajn, McManaman, and Appel.
— *See* Smith, McManaman, and Appel.
Appelhans, B. *See* Franke, Schmid, Freudenstein, Appelhans, Osborn, Weber, and Keenan.
Aquino, D. A., Margolis, R. U., and Margolis, R. K. Immunocytochemical localization of a chondroitin sulfate proteoglycan in nervous tissue. I. Adult brain, retina, and peripheral nerve. 99:1117.
—, **Margolis, R. U., and Margolis, R. K.** Immunocytochemical localization of a chondroitin sulfate proteoglycan in nervous tissue. II. Studies in developing brain. 99:1130.
Arai, H. *See* Argraves, Suzuki, Arai, Thompson, Pierschbacher, and Ruoslahti.
Arbeeny, C. M. *See* Handley, Arbeeny, Eder, and Chien.
Ardito, T. *See* Morrow, Cianci, Ardito, Mann, and Kashgarian.
Ardizzi, J. P., and Epstein, H. F. Immunochemical localization of myosin heavy chain isoforms and paramyosin in developmentally and structurally diverse muscle cell types of the nematode *Caenorhabditis elegans*. 105:2763.
Arenstorf, H. P. *See* Lothstein, Arenstorf, Chung, Walker, Wall, Wooley, and LeStourgeon.
Argan, C. *See* Nguyen, Argan, Sheffield, Bell, Shields, and Shore.
Argon, Y. *See* Ward, Argon, and Nelson.
Argraves, W. S., Suzuki, S., Arai, H., Thompson, K., Pierschbacher, M. D., and Ruoslahti, E. Amino acid sequence of the human fibronectin receptor. 105:1183.
— *See* Dedhar, Argraves, Suzuki, Ruoslahti, and Pierschbacher.
— *See* Gehlsen, Argraves, Pierschbacher, and Ruoslahti.
Ariano, M. A., and Matus, A. I. Ultrastructural localization of cyclic GMP and cyclic AMP in rat striatum. 91:287.
Arias, I. *See* Gatmaitan, Jefferson, Ruiz-Opazo, Biempica, Arias, Dudas, Leinwand, and Reid.
Arias, I. M. *See* Spray, Ginzberg, Morales, Gatmaitan, and Arias.
Arias, J. A., Moser, A. B., and Goldfischer, S. L. Ultrastructural and cytochemical demonstration of peroxisomes in cultured fibroblasts from patients with peroxisomal deficiency disorders. 100:1789.
Arion, W. J. *See* McEwen and Arion.
Aris, J. P., and Blobel, G. Identification and characterization of a yeast nucleolar protein that is similar to a rat liver nucleolar protein. 107:17.
—, **and Blobel, G.** Yeast nuclear envelope proteins cross react with an antibody against mammalian pore complex proteins. 108:2059.
Armelin, H. A. *See* Armelin and Armelin.
— *See* Armelin, Stocco, and Armelin.
Armelin, M. C. S., and Armelin, H. A. Glucocorticoid hormone modulation of both cell surface and cytoskeleton related to growth control of rat glioma cells. 97:459.
—, **Stocco, R. C., and Armelin, H. A.** Control of rat C_6 glioma cell proliferation: uncoupling of the inhibitory effects of hydrocortisone hormone in suspension and monolayer cultures. 97:455.
Armstrong, P. B. *See* Byers and Armstrong.
Arnaout, M. A., Gupta, S. K., Pierce, M. W., and Tenen, D. G. Amino acid sequence of the alpha subunit of human leukocyte adhesion receptor Mol (CR3). 106:2153.
— *See* Chatila, Geha, and Arnaout.
Arnaud, C. D. *See* Silve, Hradek, Jones, and Arnaud.
Arndt-Jovin, D. J., Robert-Nicoud, M., Baurschmidt, P., and Jovin, T. M. Immunofluorescence localization of Z-DNA in chromosomes: quantitation by scanning microphotometry and computer-assisted image analysis. 101:1422.
— *See* Defize, Arndt-Jovin, Jovin, Boonstra, Meisenhelder, Hunter, de Hey, and de Laat.
Arnn, J. *See* Damiani, Margreth, Furlan, Dahms, Arnn, and Sabbadini.
Arnold, J. *See* Low, Woodcock-Mitchell, Mitchell, Arnold, and Absher.
Arnold, W. *See* Jorgensen, Shen, Arnold, Leung, and Campbell.
Arntzen, C. J. *See* Chia and Arntzen.
— *See* Darr, Somerville, and Arntzen.
— *See* Ohad, Kyle, and Arntzen.
— *See* Stachelin and Arntzen.

Aronoff, J. *See* Wright and Aronoff.
Arpin, M., Pringault, E., Finidori, J., Garcia, A., Jeltsch, J.-M., Vandekerckhove, J., and Louvard, D. Sequence of human villin: a large duplicated domain homologous with other actin-severing proteins and a unique small carboxy-terminal domain related to villin specificity. 107:1759.
— *See* Garcia, Coudrier, Carboni, Anderson, Vandekerkhove, Mooseker, Louvard, and Arpin.
— *See* Rizzolo, Finidori, Gonzalez, Arpin, Ivanov, Adesnik, and Sabatini.
Arsenault, A. L., and Ottensmeyer, F. P. Visualization of early intramembranous ossification by electron microscopic and electron spectroscopic imaging. 98:911.
Arslan, P. *See* Pozzan, Arslan, Tsien, and Rink.
Artavanis-Tsakonas, S. *See* Johansen, Fehon, and Artavanis-Tsakonas.
Artlieb, U. *See* Wiche, Krepler, Artlieb, Pytela, and Denk.
Arumugham, R. G. *See* Jones, Arumugham, and Tanzer.
Arvan, P., and Castle, J. D. Isolated secretion granules from parotid glands of chronically stimulated rats possess an alkaline internal pH and inward-directed H^+ pump activity. 103:1257.
—, **and Castle, J. D.** Phasic release of newly synthesized secretory protein in the unstimulated rat exocrine pancreas. 104:243.
—, **and Castle, J. D.** Plasma membrane of the rat parotid gland: preparation and partial characterization of a fraction containing the secretory surface. 95:8.
Asai, D. J., and Brokaw, C. J. Effects of antibodies against tubulin on the movement of reactivated sea urchin sperm flagella. 87:114.
— *See* Ball, Carney, Albrecht, Asai, and Thompson.
— *See* Okuno, Asai, Ogawa, and Brokaw.
— *See* Schulze, Asai, Bulinski, and Kirschner.
— *See* Thompson, Asai, and Carney.
Asano, A. *See* Mimura and Asano.
Asch, A. *See* Nathan, Srimal, Farber, Sanchez, Kabbash, Asch, Gailit, and Wright.
Asch, B. B. *See* Shyy, Asch, and Asch.
Asch, H. L. *See* Shyy, Asch, and Asch.
Ascoli, M. Lysosomal accumulation of the hormone-receptor complex during receptor-mediated endocytosis of human choriogonadotropin. 99:1242.
— *See* Lloyd and Ascoli.
Ash, J. F., Fineman, R. M., Kalka, T., Morgan, M., and Wire, B. Amplification of sodium- and potassium-activated adenosine triphosphate in HeLa cells by ouabain step selection. 99:971.
Ashwell, G. *See* Harford, Wolkoff, Ashwell, and Klausner.
— *See* Wolkoff, Klausner, Ashwell, and Harford.
Askanas, V. *See* Martinuzzi, Askanas, Kobayashi, Engel, and DiMauro.
Askenase, P. W. *See* Tamir, Theoharides, Gershon, and Askenase.
Asko-Seljavaara, S. *See* Alitalo, Kuismanen, Myllylä, Kiistala, Asko-Seljavaara, and Vaheri.
Asnes, C. F. *See* Parysek, Asnes, and Olmsted.
Assoian, R. K., and Sporn, M. B. Type β transforming growth factor in human platelets: release during platelet degranulation and action on vascular smooth muscle cells. 102:1217.
Aster, J. C., Brewer, G. J., and Maisel, H. The 4.1-like proteins of the bovine lens: spectrin-binding proteins closely related in structure to red blood cell protein 4.1. 103:115.
Aszalos, A., Yang, G. C., and Gottesman, M. M. Depolymerization of microtubules increases the motional freedom of molecular probes in cellular plasma membranes. 100:1357.
Atkinson, B. G. Synthesis of heat-shock proteins by cells undergoing myogenesis. 89:666.
Atkinson, M. M., Menko, A. S., Johnson, R. G., Sheppard, J.R., and Sheridan, J. D. Rapid and reversible reduction of junctional permeability in cells infected with a temperature-sensitive mutant of avian sarcoma virus. 91:573.
Atkinson, P. H., and Lee, J. T. Co-translational excision of α-glucose and α-mannose in nascent vesicular stomatitis virus G protein. 98:2245.
— *See* Kabeenell and Atkinson.
— *See* Pollack and Atkinson.
— *See* Poruchynsky and Atkinson.
— *See* Poruchynesky, Tyndall, Both, Sato, Bellamy, and Atkinson.
— *See* Rosenfeld, Marcantonio, Hakimi, Ort, Atkinson, Sabatini, and Kreibich.
Atkinson, W. J. *See* Gunther, Alexander, Atkinson, and Gimbrone.
Atsumi, S. *See* Teeter, Atsumi, Sen, and Kuo.
Atzmon, R. *See* Rogelj, Klagsbrun, Atzmon, Kurokawa, Haimovitz, Fuks, and Vlodavsky.
Aubin, J. E., Heersche, J. N. M., Merrilees, M. J., and Sodek, J. Isolation of bone cell clones with differences in growth, hormone responses, and extracellular matrix production. 92:452.
— *See* Beertsen, Heersche, and Aubin.
— *See* Grigoriadis, Heersche, and Aubin.
Auersperg, N. *See* Lee and Auersperg.
— *See* Myrdal and Auersperg.
— *See* Myrdal, Twardzik, and Auersperg.
Aufderheide, E., Chiquet-Ehrismann, R., and Ekblom, P. Epithelial-mesenchymal interactions in the developing kidney lead to expression of tenascin in the mesenchyme. 105:599.
—, **and Ekblom, P.** Tenascin during gut development: appearance in the mesenchyme, shift in molecular forms, and dependence on epithelial-mesenchymal interactions. 107:2341.
Aufderheide, K. *See* Lefort-Tran, Aufderheide, Pouphile, Rossignol, and Beisson.
August, J. T. *See* Chen, Murphy, Willingham, Pastan, and August.
— *See* Jacobson, O'Dell, and August.
— *See* Jacobson, O'Dell, Holifield, Murphy, and August.
— *See* Murphy, Decker, and August.
Aumailley, M., and Timpl, R. Attachment of cells to basement membrane collagen type IV. 103:1569.
Aunis, D. *See* Bader, Trifaró, Langley, Thiersé, and Aunis.
— *See* Bernier-Valentin, Aunis, and Rousset.
— *See* Thuret-Carnahan, Bossu, Feltz, Langley, and Aunis.
Ausiello, D. A. *See* Mills, Macknight, Jarrell, Dayer, and Ausiello.
Austen, D. A. *See* Barnett, Kretschmer, Austen, Goebel, Hart, Elting, and Kamarck.
Austen, K. F. *See* Caulfield, Lewis Hein, and Austen.
Austerberry, C. F. *See* Paine, Austerberry, Desjarlais, and Horowitz.
Austin, B. J. *See* Yancey, John, Lal, Austin, and Revel.
Autilio-Gambetti, L. *See* Papasozomenos, Autilio-Gambetti, and Gambetti.
— *See* Papasozomenos, Yoon, Crane, Autilio-Gambetti, and Gambetti.
— *See* Tessler, Autilio-Gambetti, and Gambetti.
Avila, J. *See* Díaz-Nido, Serrano, Méndez, and Avila.
— *See* Serrano, Diáz-Nido, Wandosell, and Avila.
Avnur, Z., Small, J. V., and Geiger, B. Actin-independent association of vinculin with the cytoplasmic aspect of the plasma membrane in cell-contact areas. 96:1622.
— *See* Geiger, Avnur, and Schlessinger.
Avossa, D. *See* Hortsch, Avossa, and Meyer.
Awata, T. *See* Nishida, Nakagawa, Awata, Ohashi, Watanabe, and Manabe.
Axelrod, D. Cell-substrate contacts illuminated by total internal reflection fluorescence. 89:141.
—, **Bauer, H. C., Stya, M., and Christian, C. N.** A factor from neurons induces partial immobilization of nonclustered acetylcholine receptors on cultured muscle cells. 88:459.
— *See* Stya and Axelrod.
Axelrod, J. *See* Bareis, Hirata, Schiffman, and Axelrod.
Axelsson, S. *See* Oldberg, Jirskog-Hed, Axelsson, and Heingård.
Ayme-Southgate, A., Lasko, P., French, C., and Pardue, M. L. Characterization of the gene for mp20: a *Drosophila* muscle protein that is not found in asynchronous oscillatory flight muscle. 108:521.
Aynardi, M. W. Steinert, P. M., and Goldman, R. D. Human epithelial cell intermediated filaments: isolation, purification, and characterization. 98:1047.
Azari, P. *See* Markelonis, Oh, Park, Cha, Sofia, Kim, and Azari.
Azarnia, R., and Russell, T. R. Cyclic AMP effects on cell-to-cell junctional membrane permeability during adipocyte differentiation of 3T3-L1 fibroblasts. 100:265.
Azhar, S. *See* Reaven and Azhar.
Azzarone, B., Suarez, H., Mingari, M.-C., Moretta, L., and Fauci, A. S. 4F2 Monoclonal antibody recognizes a surface antigen on spread human fibroblasts of embryonic but not of adult origin. 98:1133.

B

Baas, P. W., Black, M. M., and Banker, G. A. Changes in microtubule polarity orientation during the development of hippocampal neurons in culture. 109:3085.
—, **and Heidemann, S. R.** Microtubule reassembly from nucleating fragments during the regrowth of amputated neurites. 103:917.
Babiarz, J. P. *See* Birk, Fitch, Babiarz, and Linsenmayer.
Bacallao, R., Antony, C., Dotti, C., Karsenti, E., Stelzer, E. H. K., and Simons, K. The subcellular organization of Madin–Darby canine kidney cells during the formation of a polarized epithelium. 109:2817.
— *See* Weisman, Bacallao, and Wickner.
Baccarani-Contri, M. *See* Fornieri, Baccarani-Contri, Quaglino, and Pasquali-Ronchetti.
Baccetti, B., Burrini, A. G., Pallini, V., and Renieri, T. Human dynein and sperm pathology. 88:102.

Baccino, D. *See* Vassalli, Baccino, and Belin.
Bächi, T. Direct observation of the budding and fusion of an enveloped virus by video microscopy of viable cells. 107:1689.
— *See* Schweizer, Fransen, Bächi, Ginsel, and Hauri.
Bachinger, H. P. *See* Keene, Sakai, Bachinger, and Burgeson.
Bachmann, M. *See* Gramzow, Bachmann, Uhlenbruck, Dorn, and Müller.
Back, R. *See* Griffiths, Back, and Marsh.
— *See* Griffiths, Fuller, Back, Hollinshead, Pfeiffer, and Simons.
Bacon, R. A., Salminen, A., Ruohola, H., Novick, P., and Ferro-Novick, S. The GTP-binding protein Ypt1 is required for transport in vitro: the Golgi apparatus is defective in *ypt1* mutants. 109:1023.
Bader, B. L. *See* Leube, Bader, Bosch, Zimbelmann, Achstaetter, and Franke.
Bader, D. Density and distribution of α-bungarotoxin-binding sites in postsynaptic structures of regenerated rat skeletal muscle. 88:338.
—, **Masaki, T., and Fischman, D.A.** Immunochemical analysis of myosin heavy chain during avian myogenesis in vivo and in vitro. 95:763.
— *See* González-Sánchez and Bader.
— *See* Zhang, Shafiq, and Bader.
Bader, M.-F., Trifaró, J.-M., Langley, O. K., Thiersé, D., and Aunis, D. Secretory cell actin-binding proteins: identification of a gel solin-like protein in chromaffin cells. 102:636.
Bader, R. *See* Altieri, Bader, Mannucci, and Edgington.
Badley, R. A. *See* Virtanen, Badley, Paasivuo, and Lehto.
Badwey, J. A. *See* Robinson, Badwey, Karnovsky, and Karnovsky.
Baehner, R. L. *See* Ingraham, Burns, Boxer, Baehner, Haak.
Baekkeskov, S. *See* Dyrberg, Baekkeskov, and Lernmark.
Baenziger, J. U. *See* Musil and Baenziger.
— *See* Natowicz, Hallett, Frier, Chi, Schlesinger, and Baenziger.
Baer, B. W., and Kornberg, R. D. The protein responsible for the repeating structure of cytoplasmic poly(A)-ribonucleoprotein. 96:717.
Baetscher, M., Pumplin, D. W., and Bloch, R. J. Vitronectin at sites of cell–substrate contact in cultures of rat myotubes. 103:369.
Baeuerle, P. A., and Huttner, W. B. Tyrosine sulfation is a *trans*-Golgi–specific protein modification. 105:2655.
Baggiolini, M. *See* Gennaro, Dewald, Horisberger, Gubler, and Baggiolini.
— *See* Lew, Monod, Waldvogel, Dewald, Baggiolini, and Pozzan.
Bagshaw, C. R. *See* Citi, Cross, Bagshaw, and Kendrick-Jones.
Bähler, M., Benfenati, F., Valtorta, F., Czernik, A. J., and Greengard, P. Characterization of synapsin I fragments produced by cysteine-specific cleavage: a study of their interactions with F-actin. 108:1841.
— *See* Benfenati, Bähler, Jahn, and Greengard.
— *See* Benfenati, Greengard, Brunner, and Bähler.
Bailey, J. *See* Gingell, Todd, and Bailey.
Bailo, M. *See* Ripellino, Bailo, Margolis, and Margolis.
Bainton, D. *See* Reggio, Bainton, Harms, Coudrier, and Louvard.
Bainton, D. F. *See* Isenberg, McEver, Phillips, Shuman, and Bainton.
— *See* Matlin, Bainton, Pesonen, Louvard, Genty, and Simons.
— *See* Stenberg, McEver, Shuman, Jacques, and Bainton.
— *See* Stenberg, Shuman, Levine, and Bainton.
— *See* Takemura, Stenberg, Bainton, and Werb.
Baird, A. *See* Feige, Bradley, Fryburg, Farris, Cousens, Barr, and Baird.
— *See* Halaban, Langdon, Birchall, Cuono, Baird, Scott, Moellmann, and McGuire.
— *See* Schubert, Ling, and Baird.
Baird, B. *See* Estes, Monfalcone, Hammes, Holowka, and Baird.
— *See* Kane, Holowka, and Baird.
— See Menon, Holowka, and Baird.
— *See* Menon, Holowka, Webb, and Baird.
Baitinger, C. *See* Willard, Simon, Baitinger, Levine, and Skene.
Bajer, A. S. Functional autonomy of monopolar spindle and evidence for oscillatory movement in mitosis. 93:33.
—, **and Molé-Bajer, J.** Reorganization of microtubules in endosperm cells and cell fragments of the higher plant *Haemanthus* in vivo. 102:263.
— *See* Molé-Bajer and Bajer.
Bakeeva, L. E. *See* Amchenkova, Bakeeva, Chentsov, Skulachev, and Zorov.
Baker, C. C. *See* Flanders, Thompson, Cissel, Van Obberghen-Schilling, Baker, Kass, Ellingsworth, Roberts, and Sporn.
Baker, D. *See* Payne, Baker, van Tuinen, and Schekman.
Baker, E. J., Schloss, J. A., and Rosenbaum, J. L. Rapid changes in tubulin RNA synthesis and stability induced by deflagellation in *Chlamydomonas*. 99:2074.
Baker, H. N. *See* Rothwell, Grasser, Baker, and Murphy.
Baker, J. B. *See* Eaton and Baker.
— *See* Hébert and Baker.
Baker, P. F. *See* von Grafenstein, Roberts, and Baker.
Baker, R. E., Jefferson, L. S., and Shiman, R. Immunocytochemical identification of phenylalanine hydroxylase and albumin in cultured hepatoma cells and isolated rat hepatocytes. 90:145.
Baker, T. J. *See* Giulian, Allen, Baker, and Tomozawa.
— *See* Giulian and Baker.
Baker, T. S., Caspar, D. L. D., Hollingshead, C. J., and Goodenough, D. A. Gap junction structures. IV. Asymmetric features revealed by low-irradiation microscopy. 96:204.
Balazovich, K. *See* Bourguignon, Nagpal, Balazovich, Guerriero, and Means.
— *See* Bourguignon, Walker, Suchard, and Balazovich.
Balch, W. E., Wagner, K. R., and Keller, D. S. Reconstitution of transport of vesicular stomatitis virus G protein from the endoplasmic reticulum to the Golgi complex using a cell-free system. 104:749.
— *See* Beckers and Balch.
— *See* Doms, Keller, Helenius, and Balch.
Balconi, G. *See* Dejana, Colella, Languino, Balconi, Corbascio, and Marchisio.
Balczon, R. *See* Schatten, Schatten, Bestor, and Balczon.
Balczon, R. D., and Brinkley, B. R. Tubulin interaction with kinetochore proteins: analysis by in vitro assembly and chemical cross-linking. 105:855.
Baldwin, T. J., and Burden, S. J. Isolation and characterization of the mouse acetylcholine receptor delta subunit gene: identification of a 148-bp *cis*-acting region that confers myotube-specific expression. 107:2271.
—, **Yoshihara, C. M., Blackmer, K., Kintner, C. R., and Burden, S. J.** Regulation of acetylcholine receptor transcript expression during development in *Xenopus laevis*. 106:469.
Balhorn, R. A model for the structure of chromatin in mammalian sperm. 93:298.
Balian, G. *See* Brown and Balian.
Balkwill, D. L. *See* Nierzwicki-Bauer, Balkwill, and Stevens.
Ball, E. H., Freitag, C., and Gurofsky, S. Vinculin interaction with permeabilized cells: disruption and reconstitution of a binding site. 103:641.
Ball, M. J. *See* Roher, Palmer, Chau, and Ball.
Ball, R. *See* Reichmann, Ball, Groner, and Friis.
Ball, R. L., Carney, D. H., Albrecht, T., Asai, D. J., and Thompson, W. C. A radiolabeled monoclonal antibody binding assay for cytoskeletal tubulin in cultured cells. 103:1033.
Ballivet, M. *See* Shieh, Ballivet, and Schmidt.
Ballmer, K. *See* Mannino, Ballmer, Zeltner, and Burger.
Balza, E. *See* Carnemolla, Balza, Siri, and Zardi.
Bamat, J. *See* Cajot, Schleuning, Medcalf, Bamat, Testuz, Liebermann, and Sordat.
Bamburg, J. R., and Bray, D. Distribution and cellular localization of actin depolymerizing factor. 105:2817.
Bame, K. J. *See* Mehrabian, Bame, and Rome.
Bandman, E., and Strohman, R. C. Increased K^+ inhibits spontaneous contractions and reduces myosin accumulation in cultured chick myotubes. 93:698.
— *See* Cerny and Bandman.
— *See* Taylor and Bandman.
Bandtlow, C. *See* Heumann, Korsching, Bandtlow, and Thoenen.
Banerjee, D., Mukherjee, T. K., and Redman, C. M. Biosynthesis of high density lipoprotein by chicken liver: intracellular transport and proteolytic processing of nascent apolipoprotein A1. 101:1219.
—, **and Redman, C. M.** Biosynthesis of high-density lipoprotein by chicken liver: conjugation of nascent lipids with apoprotein A1. 99:1917.
—, **and Redman, C. M.** Biosynthesis of high density lipoprotein by chicken liver: nature of nascent intracellular high density lipoprotein. 96:651.
Bangs, J. D., Andrews, N. W., Hart, G. W., and Englund, P. T. Post-translational modification and intracellular transport of a trypanosome variant surface glycoprotein. 103:255.
Bankaitis, V. A., Malehorn, D. E., Emr, S. D., and Greene, R. The *Saccharomyces cerevisiae SEC14* gene encodes a cytosolic factor that is required for transport of secretory proteins from the yeast Golgi complex. 108:1271.
— *See* Cleves, Novick, and Bankaitis.
Banker, G. *See* Goslin and Banker.
— *See* Goslin, Birgbauer, Banker, and Solomon.
Banker, G. A. *See* Baas, Black, and Banker.
Bankert, R. B. *See* Black, Koury, Bankert, and Repasky.
— *See* Repasky, Symer, and Bankert.
Banks-Schlegel, S., and Green, H. Involucrin synthesis and tissue assembly by keratinocytes in natural and cultured human epithelia. 90:732.
Banks-Schlegel, S. P. Keratin alterations during embryonic epidermal differentiation: a presage of adult epidermal maturation. 93:551.
—, **and Howley, P. M.** Differentiation of human epidermal cells transformed by SV40. 96:330.
Banta, L. M., Robinson, J. S., Klionsky, D. J., and Emr, S. D. Organelle assembly in yeast: characterization of yeast mutants defective

in vacuolar biogenesis and protein sorting. 107:1369.
Barak, L. S., and Webb, W. W. Diffusion of low density lipoprotein-receptor complex on human fibroblasts. 95:846.
—, and Webb, W. W. Fluorescent low density lipoprotein for observation of dynamics of individual receptor complexes on cultured human fibroblasts. 90:595.
—, Yocum, R. R., and Webb, W. W. In vivo staining of cytoskeletal actin by autointernalization of nontoxic concentrations of nitrobenzoxadiazole-phallacidin. 89:368.
— *See* Carley, Barak, and Webb.
— *See* Nothnagel, Barak, Sanger, and Webb.
— *See* Tank, Fredericks, Barak, and Webb.
Barasch, J., Gershon, M. D., Nunez, E. A., Tamir, H., and Al-Awqati, Q. Thyrotropin induces the acidification of the secretory granules of parafollicular cells by increasing the chloride conductance of the granular membrane. 107:2137.
Barazzone, P., Lesniak, M. A., Gorden, P., Van Obberghen, E., Carpentier, J.-L., and Orci, L. Binding, internalization, and lysosomal association of ^{125}I-human growth hormone in cultured human lymphocytes: A quantitative morphological and biochemical study. 87:360.
Barbat, A. *See* Trugnan, Rousset, Chantret, Barbat, and Zweibaum.
Barbet, J. *See* Reisine, Rougon, and Barbet.
Barbosa, J. A. *See* Huttner, Barbosa, Scangos, Pratcheva, and Ruddle.
Barclay, S. L. *See* Bhorjee, Barclay, Wedrychowski, and Smith.
Bard, E. *See* Rodriguez-Boulan, Paskiet, Salas, and Bard.
Bard, F., Franzini-Armstrong, C., and Ip, W. Rigor crossbridges are double-headed in fast muscle from crayfish. 105:2225.
— *See* Marazzi, Bard, Klymkowsky, and Rubin.
Bardin, C. W. *See* Bouchard, Gagnon, Phillips, and Bardin.
Bare, J. W. *See* Gruenbaum, Landesman, Drees, Bare, Saumweber, Paddy, Sedat, Smith, Benton, and Fisher.
Bareis, D. L., Hirata, F., Schiffmann, E., and Axelrod, J. Phospholipid metabolism, calcium flux, and the receptor-mediated induction of chemotaxis in rabbit neutrophils. 93:690.
Barenberg, D. *See* Madara, Barenberg, and Carlson.
Bargatze, R. F. *See* Jalkanen, Bargatze, de los Toyos, and Butcher.
Barger, S. W. *See* Winningham-Major, Staecker, Barger, Coats, and Van Eldik.
Barghusen, S. C. *See* Martin, Barghusen, Leser, and Spear.
Baribault, H., Blouin, R., Bourgon, L., and Marceau, N. Epidermal growth factor–induced selective phosphorylation of cultured rat hepatocyte 55-kD cytokeratin before filament reorganization and DNA synthesis. 109:1665.
Barkai, U., and Sherman, M. I. Analyses of the interactions between retinoid-binding proteins and embryonal carcinoma cells. 104:671.
Barker, M. E. *See* Burwen, Barker, Goldman, Hradek, Raper, and Jones.
Barnes, D. *See* Hayman, Engvall, A'Hearn, Barnes, Pierschbacher, and Ruoslahti.
Barnes, D. W. Epidermal growth factor inhibits growth of A431 human epidermoid carcinoma in serum-free cell culture. 93:1.
Barnett, T. R., Kretschmer, A., Austen, D. A., Goebel, S. J., Hart, J. T., Elting, J. J., and Kamarck, M. E. Carcinoembryonic antigens: alternative splicing accounts for the multiple mRNAs that code for novel members of the carcinoembryonic antigen family. 108:267.
Barnwell, J. W. *See* Leech, Barnwell, Aikawa, Miller, and Howard.
Baron, A. *See* Salisbury, Baron, Surek, and Melkonian.
Baron, A. T., and Salisbury, J. L. Identification and localization of a novel, cytoskeletal, centrosome-associated protein in PtK$_2$ cells. 107:2671.
— *See* Salisbury, Baron, and Sanders.
Baron, R., Neff, L., Brown, W., Courtoy, P. J., Louvard, D., and Farquhar, M. G. Polarized secretion of lysosomal enzymes: codistribution of cation-independent mannose-6-phosphate receptors and lysosomal enzymes along the osteoclast exocytic pathway. 106:1863.
—, Neff, L., Louvard, D., and Courtoy, P. J. Cell-mediated extracellular acidification and bone resorption: evidence for a low pH in resorbing lacunae and localization of a 100-kD lysosomal membrane protein at the osteoclast ruffled border. 101:2210.
Baron-Epel, O., Hernandez, D., Jiang, L.-W., Meiners, S., and Schindler, M. Dynamic continuity of cytoplasmic and membrane compartments between plant cells. 106:715.
Baron-Van Evercooren, A., Kleinman, H. K., Seppä, H. E. J., Rentier, B., and Dubois-Dalcq, M. Fibronectin promotes rat Schwann cell growth and motility. 93:211.
Barondes, S. H., Cooper, D. N., and Haywood-Reid, P. L. Discoidin I and discoidin II are localized differently in developing *Dictyostelium discoideum*. 96:291.
—, and Haywood-Reid, P. L. Externalization of an endogenous chicken muscle lectin with in vivo development. 91:568.
—, Haywood-Reid, P. L., and Cooper, D. N. W. Discoidin I, an endogenous lectin, is externalized from *Dictyostelium discoideum* in multilamellar bodies. 100:1825.
— *See* Beyer and Barondes.
— *See* Bols, Roberson, Haywood-Reid, Cerra, and Barondes.
— *See* Cerra, Haywood-Reid, and Barondes.
— *See* Roberson and Barondes.
— *See* Shadle and Barondes.
— *See* Shadle, Ginsberg, Plow, and Barondes.
— *See* Springer and Barondes.
— *See* Springer, Haywood, and Barondes.
Barr, P. J. *See* Feige, Bradley, Fryburg, Farris, Cousens, Barr, and Baird.
Barrantes, F. J. Oligomeric forms of the membrane-bound acetylcholine receptor disclosed upon extraction of the M_r 43,000 nonreceptor peptide. 92:60.
— *See* Wallimann, Walzthöny, Wegmann, Moser, Eppenberger, and Barrantes.
Barrett, A. J. *See* Capony, Morisset, Barrett, Capony, Broquet, Vignon, Chambon, Louisot, and Rochefort.
Barrett, J. N. *See* Gundersen and Barrett.
— *See* Tedeschi, Barrett, and Keane.
Barriocanal, J. G. *See* Yuan, Barriocanal, Bonifacino, and Sandoval.
Barritault, D. *See* Schreiber, Kenney, Kowalski, Thomas, Gimenez-Gallego, Rios-Candelore, Di Salvo, Barritault, Courty, Courtois, Moenner, Loret, Burgess, Mehlman, Friesel, Johnson, and Maciag.
Barrnett, R. *See* Janero and Barrnett.
Barry, B., and Mathies, R. Resonance Raman microscopy of rod and cone photoreceptors. 94:479.
Bar-Sagi, D., and Prives, J. Trifluoperazine, a calmodulin antagonist, inhibits muscle cell fusion. 97:1375.
—, Suhan, J. P., McCormick, F., and Feramisco, J. R. Localization of phospholipase A_2 in normal and *ras*-transformed cells. 106:1649.
Bar-Shavit, R., Kahn, A., Fenton, J. W., II, and Wilner, G. D. Chemotactic response of monocytes to thrombin. 96:282.
Bartelt, D. *See* Cohen, Bartelt, Jaeger, Langford, and Nemhauser.
Bartelt, D. C., Carlin, R. K., Scheele, G. A., and Cohen, W. D. Cytoskeletal system of nucleated erythrocytes. II. Presence of a high molecular weight calmodulin-binding protein. 95:278.
— *See* Carlin, Bartelt, and Siekevitz.
Barth, E.-M., Korsching, S., and Thoenen, H. Regulation of nerve growth factor synthesis and release in organ cultures of rat iris. 99:839.
Bartles, J. R., Braiterman, L. T., and Hubbard, A. L. Endogenous and exogenous domain markers of the rat hepatocyte plasma membrane. 100:1126.
—, Feracci, H. M., Stieger, B., and Hubbard, A. L. Biogenesis of the rat hepatocyte plasma membrane in vivo: comparison of the pathways taken by apical and basolateral proteins using subcellular fractionation. 105:1241.
— *See* Hubbard, Bartles, and Braiterman.
Bartlett, S. G. *See* Schmidt, Bartlett, Grossman, Cashmore, and Chua.
Bartnik, E., Osborn, M., and Weber, K. Intermediate filaments in muscle and epithelial cells of nematodes. 102:2033.
—, Osborn, M., and Weber, K. Intermediate filaments in non-neuronal cells of invertebrates: isolation and biochemical characterization of intermediate filaments from the esophagal epithelium of the molluse *Helix pomatia*. 101:427.
— *See* Wozniak, Bartnik, and Blobel.
Barton, C. H. *See* Doherty, Barton, Dickson, Seaton, Rowett, Moore, Gower, and Walsh.
— *See* Pizzey, Rowett, Barton, Dickson, and Walsh.
Bartos, B. B. *See* Durkin, Chakravarti, Barto., Liu, Friedman, and Chung.
Bar-Zvi, D. *See* Dubreuil, Byers, Sillman, Bar-Zvi, Goldstein, and Branton.
— *See* Martin-Perez, Bar-Zvi, Branton, and Erikson.
Baserga, R. *See* Kaczmarek, Calabretta, Kao, Heintz, Nevins, and Baserga.
Basson, M. *See* Wright, Basson, D'Ari, and Rine.
Bassot, J.-M. A transient intracellular coupling explains the facilitation of responses in the bioluminescent system of scale worms. 105:2235.
—, and Nicolas, G. An optional dyadic junctional complex revealed by fast-freeze fixation in the bioluminescent scale worm system. 105:2245.
— *See* Nicolas, Nicolas, Johnson, Bassot, and Hastings.
Basu, M. *See* Murthy, Basu, Sen-Majumdar, and Das.
Bataille, D. *See* Mercier, Reggio, Devilliers, Bataille, and Mangeat.
Bateman, J. L. *See* Klausner, van Renswoude, Kempf, Rao, Bateman, and Robbins.
— *See* Robbins, Oliver, Bateman, Krag, Galloway, and Mellman.
Bates, M. *See* Bunge, Bunge, and Bates.
Battaglia, D. E., and Shapiro, B. M. Hierarchies of protein cross-linking in the extracellular matrix: involvement of an egg surface transglutaminase in early stages of fertilization envelope assembly. 107:2447.
— *See* Schroeder and Battaglia.

Battenberg, E. *See* Oyler, Higgins, Hart, Battenberg, Billingsley, Bloom, and Wilson.
Baudhuin, P. *See* Courtoy, Quintart, and Baudhuin.
— *See* Draye, Courtoy, Quintart, and Baudhuin.
— *See* Oppordoes, Baudhuin, Coppens, De Roe, Edwards, Weijers, and Misset.
— *See* Quintart, Courtoy, and Baudhuin.
Bauer, G. E. *See* Fletcher, Quigley, Bauer, and Noe.
Bauer, H. C. *See* Axelrod, Bauer, Stya, and Christian.
— *See* Sonderegger, Fishman, Bokoum, Bauer, Neale, and Nelson.
Bauer, J. S. *See* Schreiner, Bauer, Danilov, Hussein, Sczekan, and Juliano.
Baulieu, E.-E. *See* Gasc, Renoir, Radanyiu, Joab, Tuohimaa, and Baulieu.
Baumann, H., and Eldredge, D. Dexamethasone increases the synthesis and secretion of a partially active fibronectin in rat hepatoma cells. 95:29.
—, Gelehrter, T. D., and Doyle, D. Dexamethasone regulates the program of secretory glycoprotein synthesis in hepatoma tissue culture cells. 85:1.
—, Hill, R. E., Sauder, D. N., and Jahreis, G. P. Regulation of major acute-phase plasma proteins by hepatocyte-stimulating factors of human squamous carcinoma cells. 102:370.
—, Hou, E., and Jahreis, G. P. Preferential degradation of the terminal carbohydrate moiety of membrane glycoproteins in rat hepatoma cells and after transfer to the membranes of mouse fibroblasts. 96:139.
—, and Jahreis, G. P. Regulation of mouse haptoglobin synthesis. 97:728.
—, Jahreis, G. P., and Gaines, K. C. Synthesis and regulation of acute phase plasma proteins in primary cultures of mouse hepatocytes. 97:866.
Baumgart, E., Völkl, A., Hashimoto, T., and Fahimi, H. D. Biogenesis of peroxisomes: immunocytochemical investigation of peroxisomal membrane proteins in proliferating rat liver peroxisomes and in catalase-negative membrane loops. 108:2221.
Baumgartel, D. M. *See* Hennessy, Frazier, Kim, Deckwerth, Baumgartel, Rotwein, and Frazier.
Baur, B. *See* Stieger, Matter, Baur, Bucher, Höchli, and Hauri.
Baurschmidt, P. *See* Arndt-Jovin, Robert-Nicoud, Baurschmidt, and Jovin.
Bayer, E. A. *See* Skutelsky and Bayer.
Bayley, H. *See* Eppler, Bayley, Greenberg, and Schwartz.
Bayna, E. M. *See* Lopez, Bayna, Litoff, Shaper, Shaper, and Shur.
Bayne, E. K., Anderson, M. J., and Fambrough, D. M. Extracellular matrix organization in developing muscle: correlation with acetylcholine receptor aggregates. 99:1486.
Bazett-Jones, D. P. *See* Rattner and Bazett-Jones.
Beardmore, J. *See* Miller, Beardmore, Kanety, Schlessinger, and Hopkins.
Beardsley, D. S. *See* Spiegel, Beardsley, Southwick, and Lux.
Bearer, E. L., and Friend, D. S. Modifications of anionic-lipid domains preceding membrane fusion in guinea pig sperm. 92:604.
—, and Orci, L. Endothelial fenestral diaphragms: a quick-freeze, deep-etch study. 100:418.
Beaty, G. *See* Martinez-Palomo, Meza, Beaty, and Cereijido.
Beaufay, H. *See* Amar-Costesec, Prado-Figueroa, Beaufay, Nagelkerke, and van Berkel.
— *See* Godelaine, Beaufay, Wibo, and Ravoet.
— *See* Paiement, Beaufay, and Godelaine.
— *See* Ravoet, Amar-Costesec, Godelaine, and Beaufay.
— *See* Wibo, Thines-Sempoux, Amar-Costesec, Beaufay, and Godelaine.
Beaulieu, S. M. *See* Henson, Begg, Beaulieu, Fishkind, Bonder, Terasaki, Lebeche, and Kaminer.
Beaumont, B. W. *See* Gibson, Beaumont, and Flint.
Beaven, M. A., Guthrie, D. F., Moore, J. P., Smith, G. A., Hesketh, T. R., and Metcalfe, J. C. Synergistic signals in the mechanism of antigen-induced exocytosis in 2H3 cells: evidence for an unidentified signal required for histamine release. 105:1129.
— *See* Hesketh, Beaven, Rogers, Burke, and Warren.
Beavo, J. A. *See* Browne, Lockwood, Su, Beavo, and Steiner.
Bechtel, P. J. *See* Bortz, Rotwein, DeVol, Bechtel, Hansen, and Hammerman.
Becich, M. J., Bendayan, M., and Reddy, J. K. Intracellular transport and storage of secretory proteins in relation to cytodifferentiation in neoplastic pancreatic acinar cells. 96:949.
Beck, K. *See* Chiquet, Masuda-Nakagawa, and Beck.
Beck, L. A., Hosick, T. J., and Sinensky, M. Incorporation of a product of mevalonic acid metabolism into proteins of Chinese hamster ovary cell nuclei. 107:1307.
Becker, E. L., Kermode, J. C., Naccache, P. H., Yassin, R., Marsh, M. L., Munoz, J. J., and Sha'afi, R. I. The inhibition of neutrophil granule enzyme secretion and chemotaxis by pertussis toxin. 100:1641.
— *See* Sha'afi, Shefcyk, Yassin, Molski, Volpi, Naccache, White, Feinstein, and Becker.
Becker, W. M. *See* Titus and Becker.
Beckerle, M. C. Identification of new protein localized at sites of cell-substrate adhesion. 103:1679.
— Microinjected fluorescent polystyrene beads exhibit saltatory motion in tissue culture cells. 98:2126.
—, Miller, D. E., Bertagnolli, M. E., and Locke, S. J. Activation-dependent redistribution of the adhesion plaque protein, talin, in intact human platelets. 109:3333.
—, and Porter, K. R. Analysis of the role of microtubules and actin in erythrophore intracellular motility. 96:354.
Beckers, C. J. M., and Balch, W. E. Calcium and GTP: essential components in vesicular trafficking between the endoplasmic reticulum and Golgi apparatus. 108:1245.
Bedard, D. P. *See* Singer, Bedard, and Johnston.
Bee, J. A. *See* Mollenhauer, Bee, Lizarbe, and von der Mark.
Beecroft, R. P. *See* Roditi, Schwarz, Pearson, Beecroft, Liu, Richardson, Bühring, Pleiss, Bülow, Williams, and Overath.
Beer, M. *See* Hiriyanna, Varkey, Beer, and Benbow.
Beertsen, W., Heersche, J. N. M., and Aubin, J. E. Free and polymerized tubulin in cultured bone cells and Chinese hamster ovary cells: the influence of cold and hormones. 95:387.
Beeuwkes, R. *See* Bulger, Beeuwkes, and Saubermann.
— *See* Saubermann, Beeuwkes, and Peters.
— *See* Saubermann, Echlin, Peters, and Beeuwkes.
Beezhold, D. W. *See* Gudewicz, Molnar, Lai, Beezhold, Siefring, Credo, and Lorand.
Begg, D. A., Rebhun, L. I., and Hyatt, H. Structural organization of actin in the sea urchin egg cortex: microvillar elongation in the absence of actin filament bundle formation. 93:24.
—, Salmon, E. D., and Hyatt, H. A. Changes in the structural organization of actin in the sea urchin egg cortex in response to hydrostatic presure. 97:1795.
— *See* Henson, Begg, Beaulieu, Fishkind, Bonder, Terasaki, Lebeche, and Kaminer.
— *See* Salmon and Begg.
— *See* Sluder and Begg.
Behar, T. *See* Dubois-Dalcq, Behar, Hudson, and Lazzarini.
— *See* Hudson, Friedrich, Behar, Dubois-Dalcq, and Lazzarini.
Behnke, O. *See* Van Deurs and Behnke.
Behrendt, N. *See* Picone, Kajtaniak, Nielsen, Behrendt, Mistronicola, Cubellis, Stoppelli, Pedersen, Danø, and Blasi.
— *See* Stephens, Pöllänen, Tapiovaara, Leung, Sim, Salonen, Rønne, Behrendt, Danø, and Vaheri.
Behrendtsen, O. *See* Werb, Tremble, Behrendtsen, Crowley, and Damsky.
Behrens, J., Birchmeier, W., Goodman, S. L., and Imhof, B. A. Dissociation of Madin-Darby canine kidney epithelial cells by the monoclonal antibody anti-Arc-1: mechanistic aspects and identification of the antigen as a component related to uvomorulin. 101:1307.
—, Mareel, M. M., Van Roy, F. M., and Birchmeier, W. Dissecting tumor cell invasion: epithelial cells acquire invasive properties after the loss of uvomorulin-mediated cell–cell adhesion. 108:2435.
Beisiegel, U. *See* Anderson, Brown, Beisiegel, and Goldstein.
Beisson, J., Cohen, J., Lefort-Tran, M., Pouphile, M., and Rossignol, M. Control of membrane fusion in exocytosis. Physiological studies on a *Paramecium* mutant blocked in the final step of the trichocyst extrusion process. 85:213.
— *See* Lefort-Tran, Aufderheide, Pouphile, Rossignol, and Beisson.
— *See* Ruiz, Garreau de Loubresse, and Beisson.
Belin, D. *See* Huarte, Belin, Bosco, Sappino, and Vassalli.
— *See* Sappino, Huarte, Belin, and Vassalli.
— *See* Vassalli, Baccino, and Belin.
Belkin, A. M., Ornatsky, O. I., Glukhova, M. A., and Koteliansky, V. E. Immunolocalization of meta-vinculin in human smooth and cardiac muscles. 107:545.
Belkowski, L. S. *See* Goldberg, Belkowski, and Bloom.
Bell, A. W. *See* Liu, Bell, Freeman, and Shore.
— *See* Nguyen, Argan, Sheffield, Bell, Shields, and Shore.
— *See* Nguyen, Bell, and Shore.
Bell, C. E. *See* Maruyama, Bell, and Majerus.
Bell, E. *See* Soranno and Bell.
Bell, L. V. *See* Oursler, Bell, Clevinger, and Osdoby.
Bell, M. E. *See* Patsalos, Bell, and Wiggins.
Bell, S. *See* Heath, Bell, and Rees.
Bellamy, A. R. *See* Poruchynsky, Tyndall, Both, Sato, Bellamy, and Atkinson.
— *See* Stirzaker, Whitfeld, Christie, Bellamy, and Both.
Bellvé A. R. *See* Feig, Klagsbrun, and Bellvé.
— *See* Ierardi, Moss, and Bellvé.
Belmont, A. *See* Dolby, Belmont, Borun, and Nicolini.
Belmont, A. S., Sedat, J. W., and Agard, D. A. A three-dimensional approach to mitotic chromosome structure: evidence for a complex hier-

archical organization. 105:77.
Bement, W. M., and Capco, D. G. Activators of protein kinase C trigger cortical granule exocytosis, cortical contraction, and cleavage furrow formation in *Xenopus laevis* oocytes and eggs. 108:885.
Benavente, R., and Krohne, G. Involvement of nuclear lamins in post-mitotic reorganization of chromatin as demonstrated by microinjection of lamin antibodies. 103:1847.
—, Rose, K. M., Reimer, G., Hügle-Dörr, B., and Scheer, U. Inhibition of nucleolar reformation after microinjection of antibodies to RNA polymerase I into mitotic cells. 105:1483.
Benbow, R. M. *See* Hiriyanna, Varkey, Beer, and Benbow.
Bendayan, M. *See* Becich, Bendayan, and Reddy.
Bendena, W. G., Garbe, J. C., Traverse, K. L., Lakhotia, S. C., and Pardue, M. L. Multiple inducers of the *Drosophila* heat shock locus 93D (*hsrw*): inducer-specific patterns of the three transcripts. 108:2017.
— *See* Fini, Bendena, and Pardue.
Bender, P. K. *See* Papasozomenos, Binder, Bender, and Payne.
Bendori, R., Salomon, D., and Geiger, B. Identification of two distinct functional domains on vinculin involved in its association with focal contacts. 108:2383.
Benedetti, E. L. *See* Dunia, Manenti, Rousselet, and Benedetti.
Benedict, W. F. *See* Laug, Tokes, Benedict, and Sorgente.
Benfenati, F., Bähler, M., Jahn, R., and Greengard, P. Interactions of synapsin I with small synaptic vesicles: distinct sites in synapsin I bind to vesicle phospholipids and vesicle proteins. 108:1863.
—, Greengard, P., Brunner, J., and Bähler, M. Electrostatic and hydrophobic interactions of synapsin I and synapsin I fragments with phospholipid bilayers. 108:1851.
— *See* Bähler, Benfenati, Valtorta, Czernik, and Greengard.
Benfield, P. A. *See* Gauthier, Lowey, Benfield, and Hobbs.
Bengtsson, T. *See* Särndahl, Lindroth, Bengtsson, Fällman, Gustavsson, Stendahl, and Andersson.
Bennett, A. L., Paulson, K. E., Miller, R. E., and Darnell, J. E., Jr. Acquisition of antigens characteristic of adult pericentral hepatocytes by differentiating fetal hepatoblasts in vitro. 105:1073.
Bennett, C. F., Spector, D. L., and Yeoman, L. C. Nonhistone protein BA is a glutathione S-transferase localized to interchromatinic regions of the cell nucleus. 102:600.
Bennett, F. C., Busch, H., Lischwe, M. A., and Yeoman, L. C. Antibodies to a nucleolar protein are localized in the nucleolus after red blood cell-mediated microinjection. 97:1566.
Bennett, G., Kan, F. W. K., and O'Shaughnessy, D. The site of incorporation of sialic acid residues into glycoproteins and the subsequent fates of these molecules in various rat and mouse cell types as shown by radioautography after injection of ^{3}H *N*-acetylmannosamine. II. Observations in tissues other than liver. 88:16.
—, and O'Shaughnessy, D. The site of incorporation of sialic acid residues into glycoproteins and the subsequent fates of these molecules in various rat and mouse cell types as shown by radioautography after injection of ^{3}H *N*-acetylmannosamine. I. Observations in hepatocytes. 88:1.
Bennett, G. S., and DiLullo, C. Slow posttranslational modification of a neurofilament protein. 100:1799.
Bennett, H., and Condeelis, J. Decoration with myosin subfragment-1 disrupts contacts between microfilaments and the cell membrane in isolated *Dictyostelium* cortices. 99:1434.
Bennett, J. *See* Meeusen, Bennett, and Cande.
Bennett, J. P., Cross, R. A., Kendrick-Jones, J., and Weeds, A. G. Spatial pattern of myosin phosphorylation in contracting smooth muscle cells: evidence for contractile zones. 107:2625.
Bennett, M. V. L. *See* Spray, Nerbonne, Campos de Carvalho, Harris, and Bennett.
Bennett, V. *See* Fowler, Davis, and Bennett.
— *See* Kaiser, O'Keefe, and Bennett.
— *See* Virshup and Bennett.
Bennett, W. F., and Lynch, G. Low-temperature induction of calcium-dependent protein phosphorylation in blood platelets. 86:280.
Bennoun, P. *See* Wollman, Olive, Bennoun, and Recouvreur.
Bensch, K. *See* Davison, Bensch, and Karasek.
Bensch, K. G. *See* Kramer, Bensch, Davison, and Karasek.
Benson, D. M., Bryan, J., Plant, A. L., Gotto, A. M., Jr., and Smith, L. C. Digital imaging fluorescence microscopy: spatial heterogeneity of photobleaching rate constants in individual cells. 100:1309.
— *See* Carron, Hwo, Dingus, Benson, Meza, and Bryan.
— *See* Plant, Benson, and Smith.
Benson, N. C. *See* Benson, Benson, and Wilt.
Benson, R. J. J., Porter-Jordan, K., Buoniconti, P., and Fine, R. E. Biochemical and cytochemical evidence indicates that coated vesicles in chick embryo myotubes contain newly synthesized acetylcholinesterase. 101:1930.
— *See* Pilch, Shia, Benson, and Fine.
Benson, S. C., Benson, N. C., and Wilt, F. The organic matrix of the skeletal spicule of sea urchin embryos. 102:1878.
— *See* Leitman, Benson, and Johnson.
Bentley, D. *See* Lefcort and Bentley.
Benton, B. *See* Gruenbaum, Landesman, Drees, Bare, Saumweber, Paddy, Sedat, Smith, Benton, and Fisher.
Benton-Vosman, P. *See* Hardeman, Minty, Benton-Vosman, Kedes, and Blau.
Benveniste, M., Livneh, E., Schlessinger, J., and Kam, Z. Overexpression of epidermal growth factor receptor in NIH-3T3–transfected cells slows its lateral diffusion and rate of endocytosis. 106:1903.
—, Schlessinger, J., and Kam Z. Characterization of internalization and endosome formation of epidermal growth factor in transfected NIH-3T3 cells by computerized image-intensified three-dimensional fluorescence microscopy. 109:2105.
— *See* Livneh, Benveniste, Prywes, Felder, Kam, and Schlessinger.
Benya, P. D., Brown, P. D., and Padilla, S. R. Microfilament modification by dihydrocytochalasin B causes retinoic acid–modulated chondrocytes to reexpress the differentiated collagen phenotype without a change in shape. 106:161.
— *See* Brown and Benya.
Ben-Ze'ev, A. Cell configuration-related control of vimentin biosynthesis and phosphorylation in cultured mammalian cells. 97:858.
— Differential control of cytokeratins and vimentin synthesis by cell-cell contact and cell spreading in cultured epithelial cells. 99:1424.
Benzonana, G. *See* Skalli, Ropraz, Trzeciak, Benzonana, Gillessen, and Gabbiani.
Berendsen, W. *See* Kuypers, Roelofsen, Berendsen, Op den Kamp, and van Deenen.
Berezney, R. Fractionation of the nuclear matrix. I. Partial separation into matricin fibrils and a residual ribonucleoprotein fraction. 85:641.
— *See* Nakayasu and Berezney.
— *See* Smith, Puvion, Buchholtz, and Berezney.
Berg, C. *See* Steitz, Berg, Hendrick, La Branche-Chabot, Metspalu, Rinke, and Yario.
Berg, C. A., and Gall, J. G. Microinjected *Tetrahymena* rDNA ends are not recognized as telomeres in *Xenopus* eggs. 103:691.
Berg, D. K. *See* Higgins and Berg.
— *See* Jacob and Berg.
— *See* Jacob, Lindstrom, and Berg.
Bergen, L. G., and Borisy, G. G. Head-to-tail polymerization of microtubules in vitro. Electron microscope analysis of seeded assembly. 84:141.
—, Kuriyama, R., and Borisy, G. G. Polarity of microtubules nucleated by centrosomes and chromosomes of Chinese hamster ovary cells in vitro. 84:151.
— *See* Gambino, Bergen, and Morris.
Berger, E. G. *See* Lucocq, Berger, and Warren.
— *See* Lucocq, Fryde, Berger, and Warren.
— *See* Roth and Berger.
— *See* Roth, Lentze, and Berger.
— *See* Strous, van Kerkhof, Willemsen, Geuze, and Berger.
— *See* Tassin, Paintrand, Berger, and Bornens.
Bergeron, J. J. M., Kotwal, G. J., Levine, G., Bilan, P., Rachubinski, R., Hamilton, M., Shore, G. C., and Ghosh, H. P. Intracellular transport of the transmembrane glycoprotein G of vesicular stomatitis virus through the Golgi apparatus as visualized by electron microscope radioautography. 94:36.
—, Rachubinski, R. A., Sikstrom, R. A., Posner, B. I., and Paiement, J. Galactose transfer to endogenous acceptors within Golgi fractions from rat liver. 92:139.
—, Resch, L., Rachubinski, R., Patel, B. A., and Posner, B. I. Effect of colchicine on internalization of prolactin in female rat liver: an in vivo radioautographic study. 96:875.
— *See* Lai, Cameron, Doherty, Posner, and Bergeron.
— *See* Lai, Cameron, Wada, Doherty, Kay, Posner, and Bergeron.
— *See* Paiement and Bergeron.
— *See* Paiement, Jolicoeur, Fazel, and Bergeron.
— *See* Paiement, Rachubinski, Ng Ying Kin, Sikstrom, and Bergeron.
— *See* Posner, Verma, Patel, and Bergeron.
— *See* Rachubinski, Verma, and Bergeron.
— *See* Warshawsky, Goltzman, Rouleau, and Bergeron.
Bergholz, E. *See* Driscoll, Dean, Reilly, Bergholz, and Chalfie.
Berglindh, T., Dibona, D. R., Pace, C. S., and Sachs, G. ATP dependence of H^+ secretion. 85:392.
Bergmann, J. E., and Fusco, P. J. The M protein of vesicular stomatitis virus associates specifically with the basolateral membranes of polarized epithelial cells independently of the G protein. 107:1707.
—, and Singer, S. J. Immunoelectron microscopic studies of the intracellular

transport of the membrane glycoprotein (G) of vesicular stomatitis virus in infected Chinese hamster ovary cells. 97:1777.
— *See* Florkiewicz, Smith, Bergmann, and Rose.
— *See* Gabel and Bergmann.
— *See* Rogalski, Bergmann, and Singer.
— *See* Suh, Bergmann, and Gabel.
Bergmann, J. S. *See* Carney and Bergmann.
Berhanu, P. *See* Jochen and Berhanu.
Berke, G. *See* Geiger, Rosen, and Berke.
Berlin, R. D., and Oliver, J. M. Surface functions during mitosis. II. Quantitation of pinocytosis and kinetic characterization of the mitotic cycle with a new fluorescence technique. 85:660.
— *See* Brown and Berlin.
— *See* Koppel, Oliver, and Berlin.
— *See* Kravit, Regula, and Berlin.
— *See* Melmed, Karanian, and Berlin.
— *See* Oliver, Osborne, Pfeiffer, Child, and Berlin.
— *See* Preston, Regula, Sager, Pearson, Daniels, Brown, and Berlin.
— *See* Regula, Pfeiffer, and Berlin.
— *See* Sager, Rothfield, Oliver, and Berlin.
— *See* Volpi and Berlin.
— *See* Walter, Berlin, Pfeiffer, and Oliver.
Berliner, G. C. *See* Epstein, Berliner, Casey, and Ortiz.
— *See* Epstein, Miller, Ortiz, and Berliner.
Berlot, C. H. *See* De Lozanne, Berlot, Leinwand, and Spudich.
Berman, L. *See* Larson, Corbi, Berman, and Springer.
Berman, P. W. *See* Haffar, Dowbenko, and Berman.
Berman, S. A *See* Bursztajn, Berman, McManaman, and Watson.
Bernabeu, C., Tobin, E. M., Fowler, A., Zabin, I., and Lake, J. A. Nascent polypeptide chains exit the ribosome in the same relative position in both eukaryotes and prokaryotes. 96:1471.
Bernanke, J. *See* Siminoski, Gonnella, Bernanke, Owen, Neutra, and Murphy.
Bernard, B. A. *See* Chen, Olden, Bernard, and Chu.
Bernardi, P., Patel, V. P., and Lodish, H. F. Lymphoid precursor cells adhere to two different sites on fibronectin. 105:489.
Bernd, P., Gershon, M. D., Nunez, E. A., and Tamir, H. Separation of dissociated thyroid follicular and parafollicular cells: Association of serotonin binding protein with parafollicular cells. 88:499.
Berndt, M. C. *See* Fox, Boyles, Berndt, Steffen, and Anderson.
Berner, P. F., Somlyo, A. V., and Somlyo, A. P. Hypertrophy-induced increase of intermediate filaments in vascular smooth muscle. 88:96.
Bernfield, M. *See* David and Bernfield.
— *See* Jalkanen, Nguyen, Rapraeger, Kurn, and Bernfield.
— *See* Jalkanen, Rapraeger, and Bernfield.
— *See* Jalkanen, Rapraeger, Saunders, and Bernfield.
— *See* Rapraeger, Jalkanen, and Bernfield.
— *See* Saunders and Bernfield.
— *See* Saunders, Jalkanen, O'Farrell, and Bernfield.
Bernhardt, R., and Matus, A. Initial phase of dendrite growth: evidence for the involvement of high molecular weight microtubule-associated proteins (HMWP) before the appearance of tubulin. 92:589.
Bernier, D. *See* Landry, Bernier, Ouellet, Goyette, and Marceau.
Bernier-Valentin, F., Aunis, D., and Rousset, B. Evidence for tubulin-binding sites on cellular membranes: plasma membranes, mitochondrial membranes, and secretory granule membranes. 97:209.
Berns, A. *See* Pieper, Schaart, Krimpenfort, Henderik, Moshage, van de Kemp, Ramaekers, Berns, and Bloemendal.
Berns, M. W. *See* Aist and Berns.
— *See* Brenner, Pepper, Berns, Tan, and Brinkley.
— *See* Koonce, Cloney, and Berns.
— *See* McNeil and Berns.
— *See* Pepper, Kim, and Berns.
— *See* Tao, Walter, and Berns.
Bernstein, I. A. *See* Zieske and Bernstein.
Bernstein, M., Hoffmann, W., Ammerer, G., and Schekman, R. Characterization of a gene product (Sec53p) required for protein assembly in the yeast endoplasmic reticulum. 101:2374.
Bernstein, S. A., Breding, D. J., and Fisher, S. K. The influence of light on cone disk shedding in the lizard, *Sceloporus occidentalis*. 99:379.
— *See* Vaughan, Fisher, Bernstein, Hale, Linberg, and Matsumoto.
Bernstein, S. I. *See* O'Donnell and Bernstein.
Bernuau, D. *See* Poliard, Bernuau, Tournier, Legrès, Schoevaert, Feldmann, and Sala-Trepat.
Berridge, M. J. *See* Cheek, Jackson, O'Sullivan, Moreton, Berridge, and Burgoyne.
Berrios, M., and Fisher, P. A. A myosin heavy chain–like polypeptide is associated with the nuclear envelope in higher eukaryotic cells. 103:711.
— *See* Fisher, Berrios, and Blobel.
— *See* Smith, Gruenbaum, Berrios, and Fisher.
Berry, R. W. Evidence for multiple somatic pools of individual axonally transported proteins. 87:379.
Bertagnolli, M. E. *See* Beckerle, Miller, Bertagnolli, and Locke.
Berthier, R. *See* Duperray, Berthier, Chagnon, Ryckewaert, Ginsberg, Plow, and Marguerie.
Bertoni-Freddari, C. *See* Zs-Nagy, Lustyik, Zs-Nagy, Zarandi, and Bertoni-Freddari.
Bertram, J. S. *See* Mehta, Bertram, and Loewenstein.
Beschorner, W. E. *See* Simons, Noga, Colombani, Beschorner, Coffey, and Hess.
Besharse, J. C., and Pfenninger, K. H. Membrane assembly in retinal photoreceptors. I. Freeze-fracture analysis of cytoplasmic vesicles in relationship to disc assembly. 87:451.
— *See* Horst, Forestner, and Besharse.
Besley, J. *See* Colman, Morser, Lane, Besley, Wylie, and Valle.
Bessen, M., Fay, R. B., and Witman, G. B. Calcium control of waveform in isolated flagellar axonemes of *Chlamydomonas*. 86:446.
Besterman, J. M., Airhart, J. A., Low, R. B., and Rannels, D. E. Pinocytosis and intracellular degradation of exogenous protein: modulation by amino acids. 96:1586.
—, **Airhart, J. A., Woodworth, R. C., and Low, R. B.** Exocytosis of pinocytosed fluid in cultured cells: kinetic evidence for rapid turnover and compartmentation. 91:716.
—, **and Cuatrecasas, P.** Phorbol esters rapidly stimulate amiloride-sensitive Na^+/H^+ exchange in a human leukemic cell line. 99:340.
Bestor, T. H. *See* Schatten, Schatten, Bestor, and Balczon.
Betto, D. D. *See* Carraro, Morale, Mussini, Lucke, Cantini, Betto, Cantani, Dalla Libera, Betto, and Noventa.
Betto, R. *See* Carraro, Morale, Mussini, Lucke, Cantini, Betto, Catani, Dalla Libera, Betto, and Noventa.
Betz, G. *See* Osawa, Betz, and Hall.
Betz, H. *See* Triller, Cluzeaud, Pfeiffer, Betz, and Korn.
Beumer, S. *See* Kooijman, de Wildt, Beumer, van der Vliet, Homan, Kalshoven, Musgrave, and van den Ende.
Bevan, S. *See* Entwistle, Zalin, Bevan, and Warner.
— *See* Entwistle, Zalin, Warner, and Bevan.
Beyer, E. C., and Barondes, S. H. Quantitation of two endogenous lactose-inhibitable lectins in embryonic and adult chicken tissues. 92:23.
—, **and Barondes, S. H.** Secretion of endogenous lectin by chicken intestinal goblet cells. 92:28.
—, **Kistler, J., Paul, D. L., and Goodenough, D. A.** Antisera directed against connexin43 peptides react with a 43-kD protein localized to gap junctions in myocardium and other tissues. 108:595.
—, **Paul, D. L., and Goodenough, D. A.** Connexin43, a protein from rat heart homologous to a gap junction protein from liver. 105:2621.
Bhakdi, S., and Tranum-Jensen, J. Terminal membrane C5b-9 complex of human complement: transition from an amphiphilic to a hydrophilic state through binding of the S protein from serum. 94:755.
— *See* Fussle, Bhakdi, Sziegoleit, Tranum-Jensen, Kranz, and Wellensiek.
— *See* Tranum-Jensen and Bhakdi.
Bhorjee, J. *See* Smith, Spector, Woodcock, Ochs, and Bhorjee.
Bhorjee, J. S., Barclay, S. L., Wedrychowski, A., and Smith, A. M. Monoclonal antibodies specific for tight-binding human chromatin antigens reveal structural rearrangements within the nucleus during the cell cycle. 97:389.
Bianco, P. *See* de Bernard, Bianco, Bonucci, Costantini, Lunazzi, Martinuzzi, Modricky, Moro, Panfili, Pollesello, Stagni, and Vittur.
Bibor-Hardy, V. *See* Laliberté, Dagenais, Filion, Bibor-Hardy, Simard, and Royal.
Bickford, K. *See* Bokoch, Bickford, and Bohl.
Biedler, J. L. *See* Lewis, Biedler, and Melera.
— *See* Meyers, Spengler, Chang, Melera, and Biedler.
Bielka, H. *See* Wiedmann, Kurzchalia, Bielka, and Rapoport.
Biemesderfer, D. *See* Sztul, Biemesderfer, Caplan, Kashgarian, and Boyer.
Biempica, L. *See* Czaja, Weiner, Flanders, Giambrone, Wind, Biempica, and Zern.
— *See* Gatmaitan, Jefferson, Ruiz-Opazo, Biempica, Arias, Dudas, Leinwand, and Reid.
Bienkowski, R. S. *See* Schwartz, Bienkowski, Coltoff-Schiller, Goldfischer, and Blumenfeld.
Bienz, D. *See* Hauri, Sterchi, Bienz, Fransen, and Marxer.
Bierer, B. E., Herrmann, S. H., Brown, C. S., Burakoff, S. J., and Golan, D. E. Lateral mobility of class I histocompatibility antigens in B lymphoblastoid cell membranes: modulation by crosslinking and effect of cell density. 105:1147.
Biessmann, H. *See* Falkner, Saumweber, and Biessmann.
— *See* Walter and Biessmann.

Bigbee, J. *See* Tennekoon, Yoshino, Peden, Bigbee, Rutkowski, Kishimoto, DeVries, and McKhann.
Bigbee, J. W. *See* Mason, Bigbee, and DeVries.
Bigner, D. D. *See* Lightner, Gumkowski, Bigner, and Erickson.
Bikker, A. *See* Roossien, de Rijk, Bikker, and Roos.
Bilan, P. *See* Bergeron, Kotwal, Levine, Bilan, Rachubinski, Hamilton, Shore, and Ghosh.
Bilinski, M., Plattner, H., and Matt, H. Secretory protein decondensation as a distinct, Ca^{2+}-mediated event during the final steps of exocytosis in *Paramecium* cells. 88:179.
Billingsley, M. *See* Oyler, Higgins, Hart, Battenberg, Billingsley, Bloom, and Wilson.
Binder, L. I., Frankfurter, A., and Rebhun, L. I. The distribution of tau in the mammalian central nervous system. 101:1371.
— *See* Papasozomenos, Binder, Bender, and Payne.
— *See* Peng, Binder, and Black.
— *See* Stearns, Wang, Tew, and Binder.
Binder, M., Tourmente, S., Roth, J., Renaud, M., and Gehring, W. J. In situ hybridization at the electron microscope level: localization of transcripts on ultrathin sections of Lowicryl K4M–embedded tissue using biotinylated probes and protein A–gold complexes. 102:1646.
Birchall, N. *See* Halaban, Langdon, Birchall, Cuono, Baird, Scott, Moellmann, and McGuire.
Birchmeier, W. *See* Behrens, Birchmeier, Goodman, and Imhof.
— *See* Behrens, Mareel, Van Roy, and Birchmeier.
Bird, P., Gething, M.-J., and Sambrook, J. Translocation in yeast and mammalian cells: not all signal sequences are functionally equivalent. 105:2905.
Birdwell, C. *See* Schubert, LaCorbiere, Klier, and Birdwell.
Birgbauer, E., and Solomon, F. A marginal band–associated protein has properties of both microtubule- and microfilament-associated proteins. 109:1609.
— *See* Goslin, Birgbauer, Banker, and Solomon.
Birk, D. E., Fitch, J. M., Babiarz, J. P., and Linsenmayer, T. F. Collagen type I and type V are present in the same fibril in the avian corneal stroma. 106:999.
—, **and Trelstad, R. L.** Extracellular compartments in matrix morphogenesis: collagen fibril, bundle, and lamellar formation by corneal fibroblasts. 99:2024.
—, **and Trelstad, R. L.** Extracellular compartments in tendon morphogenesis: collagen fibril, bundle, and macroaggregate formation. 103:231.
Birkett, C. R. *See* Sasse, Glyn, Birkett, and Gull.
Birshtein, B. K. *See* Kenter, Warren, Shields, and Birshtein.
Birukov, K. G. *See* Shirinsky, Antonov, Birukov, Sobolevsky, Romanov, Kabaeva, Antonova, and Smirnov.
Bischoff, J., Libresco, S., Shia, M. A., and Lodish, H. F. The H1 and H2 polypeptides associate to form the asialoglycoprotein receptor in human hepatoma cells. 106:1067.
Bischoff, R. Rapid adhesion of nerve cells to muscle fibers from adult rats is mediated by a sialic acid-binding receptor. 102:2273.
Bisher, M. *See* Steer, Bisher, Blumenthal, and Steven.
Bisiani, C. *See* Sher, Denis-Donini, Zanini, Bisiani, and Clementi.
Bissell, D. M. *See* Pitas, Boyles, Mahley, and Bissell.
Bissell, M. J. *See* Carter, Howlett, Martin, and Bissell.
— *See* Lee, Parry, and Bissell.
Biswas, D. K. *See* Brennessel and Biswas.
— *See* Rivera, Pasion, Wong, Fei, and Biswas.
— *See* Wong and Biswas.
Bitterman, P. B., Rennard, S. I., Adelberg, S., and Crystal, R. G. Role of fibronectin as a growth factor for fibroblasts. 97:1923.
Bixby, J. L., Lilien, J., and Reichardt, L. F. Identification of the major proteins that promote neuronal process outgrowth on Schwann cells in vitro. 107:353.
— *See* Tomaselli, Reichardt, and Bixby.
Björkroth, B. *See* Andersson, Björkroth, and Daneholt.
Blachly-Dyson, E., and Stevens, T. H. Yeast carboxypeptidase Y can be translocated and glycosylated without its amino-terminal signal sequence. 104:1183.
Black, C. M. *See* Clayton, Black, and Lloyd.
Black, J. D., and Dolly, J. O. Interaction of ^{125}I-labeled botulinum neurotoxins with nerve terminals. I. Ultrastructural autoradiographic localization and quantitation of distinct membrane acceptors for types A and B on motor nerves. 103:521.
—, **and Dolly, J. O.** Interaction of ^{125}I-labeled botulinum neurotoxins with nerve terminals. II. Autoradiographic evidence for its uptake into motor nerves by acceptor-mediated endocytosis. 103:535.
—, **Koury, S. T., Bankert, R. B., and Repasky, E. A.** Heterogeneity in lymphocyte spectrin distribution: ultrastructural identification of a new spectrin-rich cytoplasmic structure. 106:97.
Black, M. M., Aletta, J. M., and Greene, L. A. Regulation of microtubule composition and stability during nerve growth factor–promoted neurite outgrowth. 103:545.
—, **and Greene, L. A.** Changes in the colchicine susceptibility of microtubules associated with neurite outgrowth. studies with nerve growth factor-responsive PC12 Pheochromocytoma cells. 95:379.
—, **and Kurdyla, J. T.** Microtubule-associated proteins of neurons. 97:1020.
—, **and Lasek, R. J.** Slow components of axonal transport: two cytoskeletal networks. 86:616.
— *See* Baas, Black, and Banker.
— *See* Keen and Black.
— *See* Peng, Binder, and Black.
Black, P. H. *See* Jaken and Black.
Black, R., Goldman, D., Hochschwender, S., Lindstrom, J., and Hall, Z. W. Genetic variants of C2 muscle cells that are defective in synthesis of the α-subunit of the acetylcholine receptor. 105:1329.
Black, R. A. *See* Gu, Ralston, Murphy-Erdosh, Black, and Hall.
Black, V. H. *See* Miao and Black.
Blackburn, E. *See* Yao, Blackburn, and Gall.
Blackmer, K. *See* Baldwin, Yoshihara, Blackmer, Kintner, and Burden.
Bladon, T. *See* Chaly, Bladon, Setterfield, Little, Kaplan, and Brown.
Blaha, L. K. *See* Gingrich, Blaha, and Glazer.
Blair, H. C., Kahn, A. J., Crouch, E. C., Jeffrey, J. J., and Teitelbaum, S. L. Isolated osteoclasts resorb the organic and inorganic components of bone. 102:1164.
Blair, L. *See* Dudouet. Robine, Huet, Sahuquillo-Merino, Blair, Coudrier, and Louvard.
Blaker, W. D., Goodrum, J. F., and Morell, P. Axonal transport of the mitochondria-specific lipid, diphosphatidylglycerol, in the rat visual system. 89:579.
Blanchard, S. G. *See* Burgess, Sahyoun, Blanchard, LeVine, Chang, and Cuatrecasas.
Blanck, G. *See* Nicholson, Chen, Blanck, and Pollack.
Blank, G. S., and Brodsky, F. M. Clathrin assembly involves a light chain–binding region. 105:2011.
Blank, M. *See* Small, Blank, Ghez, and Pfenninger.
Blank, R. S., Thompson, M. M., and Owens, G. K. Cell cycle versus density dependence of smooth muscle alpha actin expression in cultured rat aortic smooth muscle cells. 107:299.
Blankenberg, T. *See* Friedman, Blankenberg, Sensabaugh, and Tenforde.
Blasi, F., Vassalli, J.-D., and Danø, K. Urokinase-type plasminogen activator: proenzyme, receptor, and inhibitors. 104:801.
— *See* Keski-Oja, Blasi, Leof, and Moses.
— *See* Picone, Kajtaniak, Nielsen, Behrendt, Mistronicola, Cubellis, Stoppelli, Pedersen, Danø, and Blasi.
— *See* Stoppelli, Verde, Grimaldi, Locatelli, and Blasi.
Blau, H. M. *See* Hardeman, Minty, Benton-Vosman, Kedes, and Blau.
— *See* Pavlath and Blau.
Blaustein, M. P. *See* McGraw, Somlyo, and Blaustein.
Bleil, J. D., and Wassarman, P. M. Autoradiographic visualization of the mouse egg's sperm receptor bound to sperm. 102:1363.
Blenis, J. *See* Steck, Blenis, Voss. and Wang.
Blest, A. D. *See* de Couet, Stowe, and Blest.
Blikstad, I., and Carlsson, L. On the dynamics of the microfilament system in HeLa cells. 93:122.
—, **and Lazarides, E.** Vimentin filaments are assembled from a soluble precursor in avian erythroid cells. 96:1803.
Blinks, J. R. *See* Taylor, Blinks, and Reynolds.
Blobel, G. *See* Anderson, Walter, and Blobel.
— *See* Aris and Blobel.
— *See* Fisher, Berrios, and Blobel.
— *See* Georgatos and Blobel.
— *See* Georgatos, Maroulakou, and Blobel.
— *See* Gilmore, Blobel, and Walter.
— *See* Gilmore, Walter, and Blobel.
— *See* Goldman and Blobel.
— *See* Murakami, Pain, and Blobel.
— *See* Nicchitta and Blobel.
— *See* Walter and Blobel.
— *See* Walter, Ibrahimi, and Blobel.
— *See* Waters and Blobel.
— *See* Waters, Chirico, and Blobel.
— *See* Wozniak, Bartnik, and Blobel.
Bloch, R. J. Actin at receptor-rich domains of isolated acetylcholine receptor clusters. 102:1447.
— Isolation of acetylcholine receptor clusters in substrate-associated material from cultured rat myotubes using saponin. 99:984.
—, **and Froehner, S. C.** The relationship of the postsynaptic 43K protein

to acetylcholine receptors in receptor clusters isolated from cultured rat myotubes. 104:645.
—, **and Hall, Z. W.** Cytoskeletal components of the vertebrate neuromuscular junction: vinculin, α-actinin, and filamin. 97:217.
—, **and Morrow, J. S.** An unusual β-spectrin associated with clustered acetylcholine receptors. 108:481.
— *See* Baetscher, Pumplin, and Bloch.
— *See* Pumplin and Bloch.
— *See* Shear and Bloch.
Block, B. A., and Franzini-Armstrong, C. The structure of the membrane systems in a novel muscle cell modified for heat production. 107:1099.
—, **Imagawa, T., Campbell, K. P., and Franzini-Armstrong, C.** Structural evidence for direct interaction between the molecular components of the transverse tubule/sarcoplasmic reticulum junction in skeletal muscle. 107:2587.
Block, M. A. *See* Dorne, Joyard, Block, and Douce.
Block, M. R. *See* Weidman, Melançon, Block, and Rothman.
Bloemendal, H. *See* de Jong, Hoekman, Mulders, and Bloemendal.
— *See* Pieper, Schaart, Krimpenfort, Henderik, Moshage, van de Kemp, Ramaekers, Berns, and Bloemendal.
Blok, F. J. *See* Wiegant, Blok, Defize, Linnemans, Verkley, and Boonstra.
Blok, J., Gibbs, E. M., Lienhard, G. E., Slot, J. W, and Geuze, H. J. Insulin-induced translocation of glucose transporters from post-Golgi compartments to the plasma membrane of 3T3-L1 adipocytes. 106:69.
Blood, C. H., Sasse, J., Brodt, P., and Zetter, B. R. Identification of a tumor cell receptor for VGVAPG, an elastin-derived chemotactic peptide. 107:1987.
Bloodgood, R. A., and Levin, E. N. Transient increase in calcium efflux accompanies fertilization in *Chlamydomonas*. 97:3.
—, **and May, G. S.** Functional modification of the *Chlamydomonas* flagellar surface. 93:88.
—, **Woodward, M. P., and Salomonsky, N. L.** Redistribution and shedding of flagellar membrane glycoproteins visualized using an anti-carbohydrate monoclonal antibody and concanavalin A. 102:1797.
Bloom, B. R. *See* Goldberg, Belkowski, and Bloom.
— *See* Nagata, Rosen, Makman, and Bloom.
Bloom, F. E. *See* Miller, Naus, Durand, Bloom, and Milner.
— *See* Oyler, Higgins, Hart, Battenberg, Billingsley, Bloom, and Wilson.
Bloom, G. S., Luca, F. C., and Vallee, R. B. Widespread cellular distribution of MAP 1A (microtubule-associated protein 1A) in the mitotic spindle and on interphase microtubules. 98:331.
—, **Schoenfeld, T. A., and Vallee, R. B.** Widespread distribution of the major polypeptide component of MAP 1 (microtubule-associated protein 1) in the nervous system. 98:320.
—, **and Vallee, R. B.** Association of microtubule-associated protein 2 with microtubules and intermediate filaments in cultured brain cells. 96:1523.
— *See* Hirokawa, Bloom, and Vallee.
— *See* Pfister, Wagner, Stenoien, Brady, and Bloom.
Bloom, K. *See* Kenna, Amaya, and Bloom.
Bloom, K. S., Amaya, E., Carbon, J., Clarke, L., Hill, A., and Yeh, E. Chromatin conformation of yeast centromeres. 99:1559.
Bloom, M. *See* Roy, Bloom, Milos, and Monroe.
Bloom, S. E. *See* Muscarella, Vogt, and Bloom.
Blose, S. H., Meltzer, D. I., and Feramisco, J. R. 10-nm filaments are induced to collapse in living cells microinjected with monoclonal and polyclonal antibodies against tubulin. 98:847.
— *See* Feramisco and Blose.
Blouin, R. *See* Baribault, Blouin, Bourgon, and Marceau.
Blow, J. J. *See* Sheehan, Mills, Sleeman, Laskey, and Blow.
Bluemink, J. G. *See* de Laat, Tertoolen, van der Saag, and Bluemink.
Blum, J. D. *See* Cooper, Blum, and Pollard.
Blum, J. J., Hayes, A., Jamieson, G. A., Jr., and Vanaman, T. C. Calmodulin confers calcium sensitivity on ciliary dynein ATPase. 87:386.
Blumberg, B., Fessler, L. I., Kurkinen, M., and Fessler, J. H. Biosynthesis and supramolecular assembly of procollagen IV in neonatal lung. 103:1711.
Blumenfeld, O. O. *See* Schwartz, Bienkowski, Colloff-Schiller, Goldfischer, and Blumenfeld.
Blumenthal, R. *See* Sarkar, Morris, Eidelman, Zimmerberg, and Blumenthal.
— *See* Steer, Bisher, Blumenthal, and Steven.
Boatman, D. E. *See* Deamer and Boatman.
Bobbitt, J. L. *See* Dayer, Vassalli, Bobbitt, Hull, Reich, and Krane.
Bo Chen, L. *See* Lee, Ferguson, and Bo Chen.
Bock, E. *See* Lyles, Linnemann, and Bock.
— *See* Lyles, Norrild, and Bock.
— *See* Nybroe, Albrechtsen, Dahlin, Linneman, Lyles, Møller, and Bock.
Böck, G. *See* Patzak, Böck, Fischer-Colbrie, Schauenstein, Schmidt, Lingg, and Winkler.
Bockus, B. J. *See* Johnson, Walsh, Bockus, and Chen.
Boekelheide, K. *See* Neely and Boekelheide.
Boettiger, D. *See* Adams, Pacifici, Boettiger, and Pallante.
— *See* Pacifici, Soltesz, Thal, Shanley, Boettiger, and Holtzer.
Bogenmann, E. *See* Haeuptle, Suard, Bogenmann, Reggio, Racine, and Kraehenbuhl.
Bogorad, L. *See* Rodermel and Bogorad.
Bohl, B. P. *See* Bokoch, Bickford, and Bohl.
Bohman, R. *See* James and Bohman.
Böhni, P. C., Deshaies, R. J., and Schekman, R. W. *SEC11* is required for signal peptide processing and yeast cell growth. 106:1035.
Boime, I. *See* Corless, Matzuk, Ramabhadran, Krichevsky, and Boime.
— *See* Hoshina, Boothby, and Boime.
— *See* Hoshina, Hussa, Pattillo, and Boime.
— *See* Matzuk and Boime.
— *See* Matzuk, Spangler, Camel, Suganuma, and Boime.
Bok, D., Dockstader, J., and Horwitz, J. Immunocytochemical localization of the lens main intrinsic polypeptide (MIP26) in communicating junctions. 92:213.
— *See* FitzGerald, Bok, and Horwitz.
Bokoch, G. M., Bickford, K., and Bohl, B. P. Subcellular localization and quantitation of the major neutrophil pertussis toxin substrate, G_n. 106:1927.
— *See* Jesaitis, Bokoch, Tolley, and Allen.
— *See* Jesaitis, Tolley, Bokoch, and Allen.
Bokoum, M. *See* Sonderegger, Fishman, Bokoum, Bauer, Neale, and Nelson.
Bole, D. *See* Hendershot, Bole, Köhler, and Kearney.
Bole, D. G., Hendershot, L. M., and Kearney, J. F. Posttranslational association of immunoglobulin heavy chain binding protein with nascent heavy chains in nonsecreting and secreting hybridomas. 102:1558.
— *See* Dorner, Bole, and Kaufman.
— *See* Hurtley, Bole, Hoover-Litty, Helenius, and Copeland.
Bolen, F. A. *See* Hammerschlag, Stone, Bolen, Lindsey, and Ellisman.
Bolender, R. P., Paumgartner, D., Muellener, D., Losa, G., and Weibel, E. R. Integrated stereological and biochemical studies on hepatocytic membranes. IV. Heterogeneous distribution of marker enzymes on endoplasmic reticulum membranes in fractions. 85:577.
Boller, K., Vestweber, D., and Kemler, R. Cell-adhesion molecule uvomorulin is localized in the intermediate junctions of adult intestinal epithelial cells. 100:327.
Bollini, R., Vitale, A., and Chrispeels, M. J. In vivo and in vitro processing of seed reserve protein in the endoplasmic reticulum: evidence for two glycosylation steps. 96:999.
Bologna, M., Allen, R., and Dulbecco, R. Organization of cytokeratin bundles by desmosomes in rat mammary cells. 102:560.
Bolognesi, A. *See* Schwartz, Bolognesi, and Fridovich.
Bols, N. C., Roberson, M. M., Haywood-Reid, P. L., Cerra, R. F., and Barondes, S. H. Secretion of cytoplasmic lectin from *Xenopus laevis* skin. 102:492.
Bolsover, S. R. *See* Hart, Richardson, Bolsover, and Raff.
Bolton, W. E. *See* Boyd, Bolton, and Brinkley.
Bolzau, E. *See* Marsh, Bolzau, White, and Helenius.
Bolzau, E. M. *See* Copeland, Doms, Bolzau, Webster, and Helenius.
Bomsel, M., Prydz, K., Parton, R. G., Gruenberg, J., and Simons, K. Endocytosis in filter-grown Madin–Darby canine kidney cells. 109:3243.
— *See* Parton, Prydz, Bomsel, Simons, and Griffiths.
Bonaccorso, J. *See* Herman, Brant, Warty, Bonaccorso, Klein, Kormos, and Borovetz.
Bonaldo, M. C., Souto-Padron, T., de Souza, W., and Goldenberg, S. Cell–substrate adhesion during *Trypanosoma cruzi* differentiation. 106:1349.
Bonatti, S. *See* Torrisi and Bonatti.
— *See* Torrisi, Lotti, Pavan, Migliaccio, and Bonatti.
Bond, M., and Somlyo, A. V. Dense bodies and actin polarity in vertebrate smooth muscle. 95:403.
Bondanza, S. *See* De Luca, D'Anna, Bondanza, Franzi, and Cancedda.
Bonder, E. M., and Mooseker, M. S. Cytochalasin B slows but does not prevent monomer addition at the barbed end of the actin filament. 102:282.
—, **and Mooseker, M. S.** Direct electron microscopic visualization of barbed end capping and filament cutting by intestinal microvillar 95-kdalton protein (villin): a new actin assembly assay using the *Limulus* acrosomal process. 96:1097.
— *See* DeRosier, Tilney, Bonder, and Frankl.
— *See* Henson, Begg, Beaulieu, Fishkind, Bonder, Terasaki, Lebeche, and Kaminer.
— *See* Tilney, Bonder, Coluccio, and Mooseker.
— *See* Tilney, Bonder, and DeRosier.
Bondurant, M. C. *See* Koury, Koury, and Bondurant.

Bonhoeffer, F. *See* Rathjen, Wolff, Frank, Bonhoeffer, and Rutishauser.
Bonifacino, J. S., Perez, P., Klausner, R. D., and Sandoval, I. V. Study of the transit of an integral membrane protein from secretory granules through the plasma membrane of secreting rat basophilic leukemia cells using a specific monoclonal antibody. 102:516.
—, Suzuki, C. K., Lippincott-Schwartz, J., Weissman, A. M., and Klausner, R. D. Pre-Golgi degradation of newly synthesized T-cell antigen receptor chains: intrinsic sensitivity and the role of subunit assembly. 109:73.
— *See* Chen, Bonifacino, Yuan, and Klausner.
— *See* Yuan, Barriocanal, Bonifacino, and Sandoval.
Bonin, P. *See* Singh, Adams, and Bonin.
Bonini, N. M., and Nelson, D. L. Differential regulation of *Paramecium* ciliary motility by cAMP and cGMP. 106:1615.
Bonitz, P. *See* Eichner, Bonitz, and Sun.
Bonnanfant-Jais, M.-L. *See* Moreau, Angelier, Bonnanfant-Jais, Gounon, and Kubisz.
Bonneau, A.-M., Darveau, A., and Sonenberg, N. The effect of viral infection on host protein synthesis and mRNA association with the cytoplasmic cytoskeletal structure. 100:1209.
Bonner, W. M. *See* Wu, Nishioka, and Bonner.
Bonucci, E. *See* de Bernard, Bianco, Bonucci, Costantini, Lunazzi, Martinuzzi, Modricky, Moro, Panfili, Pollesello, Stagni, and Vittur.
Bonventre, J. V. *See* Polla, Bonventre, and Krane.
Bookchin, R. M. *See* Lew, Hockaday, Freeman, and Bookchin.
Boonstra, J., Moolenaar, W. H., Harrison, P. H., Moed, P., van der Saag, P. T., and de Laat, S. W. Ionic responses and growth stimulation induced by nerve growth factor and epidermal growth factor in rat pheochromocytoma (PC12) cells. 97:92.
— *See* Defize, Arndt-Jovin, Jovin, Boonstra, Meisenhelder, Hunter, de Hey, and de Laat.
— *See* Defize, Boonstra, Meisenhelder, Kruijer, Tertoolen, Tilly, Hunter, van Bergen en Henegouwen, Moolenaar, and de Laat.
— *See* Van Hooff, Holthuis, Oestreicher, Boonstra, De Graan, and Gispen.
— *See* Wiegant, Blok, Defize, Linnemans, Verkley, and Boonstra.
Booth, A. G. *See* Edwards and Booth.
Boothby, M. *See* Hoshina, Boothby, and Boime.
Boquet, P. *See* Moya, Dautry-Varsat, Goud, Louvard, and Boquet.
Bordas, J., Mant, G. R., Diakun, G. P., and Nave, C. X-ray diffraction evidence for the existence of 102.0- and 230.0-nm transverse periodicities in striated muscle. 105:1311.
Bordes, N. *See* Klotz, Bordes, Laine, Sandoz, and Bornens.
Borgese, N., and Meldolesi, J. Localization and biosynthesis of NADH-cytochrome b_5 reductase, an integral membrane protein, in rat liver cells. I. Distribution of the enzyme activity in microsomes, mitochondria, and Golgi complex. 85:501.
—, Pietrini, G., and Meldolesi, J. Localization and biosynthesis of NADH-cytochrome b_5 reductase, an integral membrane protein, in rat liver cells. III. Evidence for the independent insertion and turnover of the enzyme in various subcellular compartments. 86:38.
— *See* de Curtis, Fumagalli, and Borgese.
— *See* Meldolesi, Corte, Pietrini, and Borgese.
Borisy, G. G. *See* Bergen and Borisy.
— *See* Bergen, Kuriyama, and Borisy.
— *See* Bulinski and Borisy.
— *See* De Brabander, Bulinski, Geuens, De Mey and Borisy.
— *See* Euteneuer, Ris, and Borisy.
— *See* Gorbsky and Borisy.
— *See* Gorbsky, Sammak, and Borisy.
— *See* Keryer, Ris, and Borisy.
— *See* Kuriyama and Borisy.
— *See* Lim, Sammak, and Borisy.
— *See* Sammack, Gorbsky, and Borisy.
— *See* Scherson, Kreis, Schlessinger, Littauer, Borisy, and Geiger.
— *See* Soltys and Borisy.
— *See* Tombes and Borisy.
— *See* Webster, Gundersen, Bulinski, and Borisy.
Bormioli, S. P., Sartore, S., Vitadello, M., and Schiaffino, S. "Slow" myosins in vertebrate skeletal muscle. An immunofluorescence study. 85:672.
— *See* Sartore, Gorza, Bormioli, Libera, and Schiaffino.
Bornens, M., Paintrand, M., and Celati, C. The cortical microfilament system of lymphoblasts displays a periodic oscillatory activity in the absence of microtubules: implications for cell polarity. 109:1071.
— *See* Klotz, Bordes, Laine, Sandoz, and Bornens.
— *See* Komesli, Tournier, Paintrand, Margolis, Job, and Bornens.
— *See* Tassin, Maro, and Bornens.
— *See* Tassin, Paintrand, Berger, and Bornens.
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— *See* Majack and Bornstein.
— *See* Majack, Cook, and Bornstein.
— *See* Mumby, Raugi, and Bornstein.
— *See* Oohira, Wight, McPherson, and Bornstein.
— *See* Raugi, Mumby, Abbott-Brown, and Bornstein.
— *See* Sage, Mecham, Johnson, and Bornstein.
Borovetz, H. S. *See* Herman, Brant, Warty, Bonaccorso, Klein, Kormos, and Borovetz.
Borregaard, N., Heiple, J. M., Simons, E. R., and Clark, R. A. Subcellular localization of the *b*-cytochrome component of the human neutrophil microbicidal oxidase: translocation during activation. 97:52.
Borsi, L., Carnemolla, B., Castellani, P., Rosellini, C., Vecchio, D., Allemanni, G., Chang, S. E., Taylor-Papadimitriou, J., Pande, H., and Zardi, L. Monoclonal antibodies in the analysis of fibronectin isoforms generated by alternative splicing of mRNA precursors in normal and transformed human cells. 104:595.
— *See* Castellani, Siri, Rosellini, Infusini, Borsi, and Zardi.
Bortz, J. D., Rotwein, P., DeVol, D., Bechtel, P. J., Hansen, V. A., and Hammerman, M. R. Focal expression of insulin-like growth factor I in rat kidney collecting duct. 107:811.
Borun, T. W. *See* Dolby, Belmont, Borun, and Nicolini.
Bosch, F. X., Leube, R. E., Achtstätter, T., Moll, R., and Franke, W. W. Expression of simple epithelial type cytokeratins in stratified epithelia as detected by immunolocalization and hybridization in situ. 106:1635.
— *See* Leube, Bader, Bosch, Zimbelmann, Achtstaetter, and Franke.
Bosco, D. *See* Huarte, Belin, Bosco, Sappino, and Vassalli.
Bossu, J.-L. *See* Thuret-Carnahan, Bossu, Feltz, Langley, and Aunis.
Boston, R. S. *See* Burland, Gull, Schedl, Boston, and Dove.
Both, G. W. *See* Poruchynsky, Tyndall, Both, Sato, Bellamy, and Atkinson.
— *See* Stirzaker, Whitfeld, Christie, Bellamy, and Both.
Bothwell, M. *See* Heidemann, Joshi, Shechter, Fletcher, and Bothwell.
Bothwell, M. A. *See* Gunning, Landreth, Bothwell and Shooter.
Botstein, D. *See* Drubin, Miller, and Botstein.
— *See* Huffaker, Thomas, and Botstein.
Bottger, B. A. *See* Hedin, Bottger, Forsberg, Johansson, and Thyberg.
Boucaut, J.-C., Darribère, T., Poole, T. J., Aoyama, H., Yamada, K. M., and Thiery, J.-P. Biologically active synthetic peptides as probes of embryonic development: a competitive peptide inhibitor of fibronectin function inhibits gastrulation in amphibian embryos and neural crest cell migration in avian embryos. 99:1822.
Bouchard, P., Gagnon, C., Phillips, D. M., and Bardin, C. W. The localization of protein carboxyl-methylase in sperm tails. 86:417.
Bouché, M., Goldfine, S. M., and Fischman, D. A. Posttranslational incorporation of contractile proteins into myofibrils in a cell-free system. 107:587.
Bouck, G. B. *See* Chen and Bouck.
— *See* Dubreuil and Bouck.
— *See* Dubreuil, Rosiere, Rosner, and Bouck.
— *See* Geetha-Habib and Bouck.
— *See* Rogalski and Bouck.
Bouhnik, J., Cassio, D., Coezy, E., Corvol, P., and Weiss, M. C. Angiotensinogen production by rat hepatoma cells in culture and analysis of its regulation by techniques of somatic cell genetics. 97:549.
Boukamp, P., Petrussevska, R. T., Breitkreutz, D., Hornung, J., Markham, A., and Fusenig, N. E. Normal keratinization in a spontaneously immortalized aneuploid human keratinocyte cell line. 106:761.
Boulay, F., Doms, R. W., Webster, R. G., and Helenius, A. Posttranslational oligomerization and cooperative acid activation of mixed influenza hemagglutinin trimers. 106:629.
Bourdon, M. A., and Ruoslahti, E. Tenascin mediates cell attachment through an RGD-dependent receptor. 108:1149.
Bourgeois, S. *See* Dean, Newby, and Bourgeois.
— *See* Gasson and Bourgeois.
Bourgon, L. *See* Baribault, Blouin, Bourgon, and Marceau.
Bourguet, J. *See* Hays, Bourguet, Satir, Franki, and Rapoport.
Bourguignon, L. Y., Nagpal, M. L., and Hsing, Y. C. Phosphorylation of myosin light chain during capping of mouse T-lymphoma cells. 91:889.
Bourguignon, L. Y. W., Nagpal, M. L., Balazovich, K., Guerriero, V., and Means, A. R. Association of myosin light chain kinase with lymphocyte membrane-cytoskeleton complex. 95:793.
—, Suchard, S. J., Nagpal, M. L., and Glenney, J. R., Jr. A T-lymphoma transmembrane glycoprotein (GP 180) is linked to the cytoskeletal protein, fodrin. 101:477.
—, Suchard, S. J., and Kalomiris, E. L. Lymphoma Thy-1 glycoprotein is linked to the cytoskeleton via a 4.1-like protein. 103:2529.
—, Walker, G., Suchard, S. J., and Balazovich, K. A lymphoma plasma membrane–associated protein with ankyrin-like properties. 102:2115.
— *See* Kalomiris and Bourguignon.
Bourne, H. R. *See* Kaslow, Groppi, Abood, and Bourne.
Bourret, L. *See* Neff, Bourret, Miao, and Dice.

Bouvagnet, P. *See* Dechesne, Bouvagnet, Walzthöny, and Léger.
Bouziges, F. *See* Simon-Assmann, Bouziges, Vigny, and Kedinger.
Bowen, B. R., Nguyen, T., and Lasky, L. A. Characterization of a human homologue of the murine peripheral lymph node homing receptor. 109:421.
Bowen-Pope, D. F., DiCorleto, P. E., and Ross, R. Interactions between the receptors for platelet-derived growth factor and epidermal growth factor. 96:679.
— *See* Harlan, Thompson, Ross, and Bowen-Pope.
Bowers, B. A morphological study of plasma and phagosome membranes during endocytosis in *Acanthamoeba*. 84:246.
—, **and Olszewski, T. E.** *Acanthamoeba* discriminates internally between digestible and indigestible particles. 97:317.
—, **Olszewski, T. E., and Hyde, J.** Morphometric analysis of volumes and surface areas in membrane compartments during endocytosis in *Acanthamoeba*. 88:509.
— *See* Cabib, Sburlati, Bowers, and Silverman.
— *See* Hammer, Bowers, Paterson, and Korn.
— *See* Hohman and Bowers.
— *See* Miyata, Bowers, and Korn.
— *See* Molano, Bowers, and Cabib.
Bowers, D. E., Jr. *See* Whitson, Harrison, Dunlap, Bowers, Fisher, Robey, and Termine.
Bowles, D. J., Marcus, S. E., Pappin, D. J. C., Findlay, J. B. C., Eliopoulos, E., Maycox, P. R., and Burgess, J. Posttranslational processing of concanavalin A precursors in jackbean cotyledons. 102:1284.
Boxer, L. A. *See* Ingraham, Burns, Boxer, Baehner, and Haak.
Boyd, A. E. *See* Snabes, Boyd, and Bryan.
Boyd, A. E. III, Bolton, W. E., and Brinkley, B. R. Microtubules and beta cell function: effect of colchicine on microtubules and insulin secretion in vitro by mouse beta cells. 92:425.
Boyd, C. O. *See* Parvola, Strauss, Boyd, and Nestler.
Boydston, W. R. *See* Sohal and Boydston.
Boyer, B., Tucker, G. C., Vallés, A. M., Franke, W. W., and Thiery, J. P. Rearrangements of desmosomal and cytoskeletal proteins during the transition from epithelial to fibroblastoid organization in cultured rat bladder carcinoma cells. 109:1495.
— *See* Woods, Boyer, Vogt, and Lazarides.
Boyer, J. L. *See* Easter, Wade, and Boyer.
— *See* Meier, Sztul, Reuben, and Boyer.
— *See* Sztul, Biemesderfer, Caplan, Kashgarian, and Boyer.
Boyles, J., Fox, J. E. B., Phillips, D. R., and Stenberg, P. E. Organization of the cytoskeleton in resting, discoid platelets: preservation of actin filaments by a modified fixation that prevents osmium damage. 101:1463.
— *See* Pitas, Boyles, Mahley, and Bissell.
Boyles, J. K. *See* Fox, Boyles, Berndt, Steffen, and Anderson.
— *See* Fox, Boyles, Reynolds, and Phillips.
Boynton, J. E. *See* Schmidt, Myers, Gillham, and Boynton.
— *See* Schmidt, Richardson, Gillham, and Boynton.
Brackenbury, R., Greenberg, M. E., and Edelman, G. M. Phenotypic changes and loss of N-CAM-mediated adhesion in transformed embryonic chicken retinal cells. 99:1944.
— *See* Friedlander, Brackenbury, and Edelman.
— *See* Greenberg, Brackenbury, and Edelman.
Brada, D. *See* Lucocq, Brada, and Roth.
— *See* Nakano, Brada, and Schekman.
Bradley, D. *See* Damsky, Knudsen, Bradley, Buck, and Horwitz.
Bradley, J. D. *See* Feige, Bradley, Fryburg, Farris, Cousens, Barr, and Baird.
Bradshaw, R. A. *See* Lemmon, Riley, Thomas, Hoover, Maciag, and Bradshaw.
Brady, R. C., Cabral, F., and Dedman, J. R. Identification of a 52-kD calmodulin-binding protein associated with the mitotic spindle apparatus in mammalian cells. 103:1855.
— *See* Pardue, Perry, Brady, and Dedman.
Brady, S. T., Tytell, M., Heriot, K., and Lasek, R. J. Axonal transport of calmodulin: a physiologic approach to identification of long-term associations between proteins. 89:607.
—, **Tytell, M., and Lasek, R. J.** Axonal tubulin and axonal microtubules: biochemical evidence for cold stability. 99:1716.
— *See* Pfister, Wagner, Stenoien, Brady, and Bloom.
— *See* Schroer, Brady, and Kelly.
Braell, W. A., Schlossman, D. M., Schmid, S. L., and Rothman, J. E. Dissociation of clathrin coats coupled to the hydrolisis of ATP: role of an uncoating ATPase. 99:735.
— *See* Schlossman, Schmid, Braell, and Rothman.
Braiterman, L. T. *See* Bartles, Braiterman, and Hubbard.
— *See* Hubbard, Bartles, and Braiterman.
Brammer, M. *See* Jessen, Morgan, Brammer, and Mirsky.
Branch, W. J. *See* Mullock, Branch, van Schaik, Gilbert, and Luzio.
Brandan, E., Maldonado, M., Garrido, J., and Inestrosa, N. C. Anchorage of collagen-tailed acetylcholinesterase to the extracellular matrix is mediated by heparan sulfate proteoglycans. 101:985.
Brandenburg, D. *See* Fehlmann, Carpentier, Le Cam, Thamm, Saunders, Brandenburg, Orci, and Freychet.
Brandley, B. K., Ross, T. S., and Schnaar, R. L. Multiple carbohydrate receptors on lymphocytes revealed by adhesion to immobilized polysaccharides. 105:991.
Brandon, D. L. *See* Zavala and Brandon.
Brandriss, M. C. *See* Kaput, Brandriss, and Prussak-Wieckowska.
Brands, R., Snider, M. D., Hino, Y., Park, S. S., Gelboin, H. V., and Rothman, J. E. Retention of membrane proteins by the endoplasmic reticulum. 101:1724.
— *See* Griffiths, Brands, Burke, Louvard, and Warren.
— *See* Rothman, Urbani, and Brands.
Brandt, N. *See* Brunschwig, Brandt, Caswell, and Lukeman.
Brant, A. M. *See* Herman, Brant, Warty, Bonaccorso, Klein, Kormos, and Borovetz.
Branton, D. *See* Byers, Dubreuil, Branton, Kiehart, and Goldstein.
— *See* Byers, Husain-Chishti, Dubreuil, Branton, and Goldstein.
— *See* Dubreuil, Byers, Branton, Goldstein, and Kiehart.
— *See* Dubreuil, Byers, Sillman, Bar-Zvi, Goldstein, and Branton.
— *See* Fowler, Luna, Hargreaves, Taylor, and Branton.
— *See* Luna, Fowler, Swanson, Branton, and Taylor.
— *See* Martin-Perez, Bar-Zvi, Branton, and Erikson.
— *See* Marty and Branton.
— *See* Mueller and Branton.
— *See* Pesacreta, Byers, Dubreuil, Kiehart, and Branton.
— *See* Siegel and Branton.
— *See* Tyler, Anderson, and Branton.
— *See* Wiedenmann, Lawley, Grund, and Branton.
Brasier, A. R. *See* Miljanich, Brasier, and Kelly.
Braslau, D. L. *See* Giugni, Braslau, and Haigler.
Braulke, T., Gartung, C., Hasilik, A., and von Figura, K. Is movement of mannose 6-phosphate-specific receptor triggered by binding of lysosomal enzymes? 104:1735.
Braun, P. E. *See* Matthieu, Roch, Omlin, Rambaldi, Almazan, and Braun.
Braunhut, S. J., Gudas, L. J., Kurokawa, T., Sasse, J., and D'Amore, P. A. Expression of fibroblast growth factor by F9 teratocarcinoma cells as a function of differentiation. 108:2467.
Brautigan, D. L. *See* Picard, Capony, Brautigan, and Dorée.
Bravo, D. A. *See* Haffar, Aponte, Bravo, John, Hess, and Firestone.
Bravo, R., and Celis, J. E. A search for differential polypeptide synthesis throughout the cell cycle of HeLa cells. 84:795.
—, **Fey, S. J., Larsen, P. M., Coppard, N., and Celis, J. E.** Proteins IEF (isoelectric focusing) 31 and IEF 46 are keratin-type components of the intermediate-sized filaments: keratins of various human cultured epithelial cells. 96:416.
—, **and Macdonald-Bravo, H.** Existence of two populations of cyclin/proliferating cell nuclear antigen during the cell cycle: association with DNA replication sites. 105:1549.
— *See* Pesonen, Bravo, and Simons.
— *See* Toschi and Bravo.
Brawley, S. H., and Robinson, K. R. Cytochalasin treatment disrupts the endogenous currents associated with cell polarization in fucoid zygotes: studies of the role of F-actin in embryogenesis. 100:1173.
Bray, D. *See* Bamburg and Bray.
— *See* Hollenbeck and Bray.
Bray, G. M. *See* Peterson and Bray.
Bray, S. J. *See* Standart, Bray, George, Hunt, and Ruderman.
Brayton, C. F. *See* McCaffrey, Falcone, Brayton, Agarwal, Welt, and Weksler.
Bré, M.-H., Kreis, T. E., and Karsenti, E. Control of microtubule nucleation and stability in Madin–Darby canine kidney cells: the occurrence of noncentrosomal, stable detyrosinated microtubules. 105:1283.
Breckenridge, W. C. *See* LeBlanc, Földvári, Spencer, Breckenridge, Fenwick, Williams, and Mezei.
Breckler, J., and Lazarides, E. Isolation of a new high molecular weight protein associated with desmin and vimentin filaments from avian embryonic skeletal muscle. 92:795.
Breding, D. J. *See* Bernstein, Breding, and Fisher.
Bredt, W. *See* Gobel, Speth, and Bredt.
Breen, G. A. M., and Scheffler, I. E. Cytoplasmic inheritance of oligomycin resistance in Chinese hamster ovary cells. 86:723.
Breitfeld, P. *See* Mostov, Breitfeld, and Harris.
Breitfeld, P. P., Harris, J. M., and Mostov, K. E. Postendocytotic sorting of the ligand for the polymeric immunoglobulin receptor in Madin-Darby canine kidney cells. 109:475.
Breitkreutz, D. *See* Boukamp, Petrussevska, Breitkreutz, Hornung, Mark-

ham, and Fusenig.
Brelvi, Z. S., and Studzinski, G. P. Changes in the expression of oncogenes encoding nuclear phosphoproteins but not c-Ha-Ras have a relationship to monocytic differentiation of HL 60 cells. 102:2234.
Brenchley, P. E. *See* Klein, Brown, Oegema, Brenchley, Anderson, Dickinson, Horigan, and Hassell.
Brennan, M. D., Warren, T. G., and Mahowald, A. P. Signal peptides and signal peptidase in *Drosophila melanogaster*. 87:516.
Brennan, S. J. *See* Gipson, Grill, Spurr, and Brennan.
Brenneman, D. E., Neale, E. A., Foster, G. A., d'Autremont, S. W., and Westbrook, G. L. Nonneuronal cells mediate neurotrophic action of vasoactive intestinal peptide. 104:1603.
Brenner, S., Pepper, D., Berns, M. W., Tan, E., and Brinkley, B. R. Kinetochore structure, duplication, and distribution in mammalian cells: analysis by human autoantibodies from scleroderma patients. 91:95.
— *See* Cabral, Wible, Brenner, and Brinkley.
Brenner, S. L. *See* Brinkley, Cox, Pepper, Wible, Brenner, and Pardue.
Brennessel, B. A., and Biswas, D. K. Regulated expression of the prolactin gene in rat pituitary tumor cells. 87:6.
Bressan, G. M. *See* Colombatti, Bressan, Castellani, and Volpin.
Bretscher, A. Purification of an 80,000-dalton protein that is a component of the isolated microvillus cytoskeleton, and its localization in nonmuscle cells. 97:425.
— Rapid phosphorylation and reorganization of ezrin and spectrin accompany morphological changes induced in A-431 cells by epidermal growth factor. 108:921.
—, **and Lynch, W.** Identification and localization of immunoreactive forms of caldesmon in smooth and nonmuscle cells: a comparison with the distributions of tropomyosin and α-actinin. 100:1656.
—, **and Weber, K.** Fimbrin, a new microfilament-associated protein present in microvilli and other cell surface structures. 86:335.
— *See* Coluccio and Bretscher.
— *See* Gould, Cooper, Bretscher, and Hunter.
— *See* Tilney, Tilney, Stephens, Merte, Drenckhahn, Cotanche, and Bretscher.
— *See* Verner and Bretscher.
Bretscher, M. S. Fibroblasts on the move. 106:235.
— *See* West, Bretscher, and Watts.
Brett, J. *See* Stern, Brett, Harris, and Nawroth.
Brett, J. G., Steinberg, S. F., de Groot, P. G., Nawroth, P. P., and Stern, D. M. Norepinephrine down-regulates the activity of protein S on endothelial cells. 106:2109.
Bretthauer, R. K. *See* Fischer, Natowicz, Sly, and Bretthauer.
Bretz, H. *See* Bretz, Bretz, and Palade.
Bretz, R., Bretz, H., and Palade, G. E. Distribution of terminal glycosyltransferases in hepatic Golgi fractions. 84:87.
Brewer, G. J. *See* Aster, Brewer, and Maisel.
Brewer, P. S. *See* Davidson, Klagsbrun, Hill, Buckley, Sullivan, Brewer, and Woodward.
Brickley-Parsons, D. *See* Landis, Sanzone, Brickley-Parsons, and Glimcher.
Bridges, C. D. *See* Hollyfield, Varner, Rayborn, Liou, and Bridges.
Bridges, C. D. B. *See* Gonzalez-Fernandez, Landers, Glazebrook, Fong, Liou, Lam, and Bridges.
Bridges, K., Levenson, R., Housman, D., and Cantley, L. Calcium regulates the commitment of murine erythroleukemia cells to terminal erythroid differentiation. 90:542.
Bridgman, P., Carr, C., Pedersen, S. E., and Cohen, J. B. Visualization of the cytoplasmic surface of *Torpedo* postsynaptic membranes by freeze-etch and immunoelectron microscopy. 105:1829.
Bridgman, P. C., and Dailey, M. E. The organization of myosin and actin in rapid frozen nerve growth cones. 108:95.
—, **Kachar, B., and Reese, T. S.** The structure of cytoplasm in directly frozen cultured cells. II. Cytoplasmic domains associated with organelle movements. 102:1510.
—, **and Nakajima, Y.** Distribution of filipin-sterol complexes on cultured muscle cells: cell-substratum contact areas associated with acetylcholine receptor clusters. 96:363.
—, **Nakajima, S., Greenberg, A. S., and Nakajima, Y.** Freeze-fracture and electrophysiological studies of newly developed acetylcholine receptors in *Xenopus* embryonic muscle cells. 98:2160.
—, **and Reese, T. S.** The structure of cytoplasm in directly frozen cultured cells. I. Filamentous meshworks and the cytoplasmic ground substance. 99:1655.
— *See* Kachar, Bridgman, and Reese.
— *See* Nakajima and Bridgman.
Bridoux, A. M. *See* Couchie, Fages, Bridoux, Rolland, Tardy, and Nunez.
Brier, J., Fechheimer, M., Swanson, J., and Taylor, D. L. Abundance, relative gelation activity, and distribution of the 95,000-dalton actin-binding protein from *Dictyostelium discoideum*. 97:178.
Briggaman, R. A. *See* O'Keefe, Briggaman, and Herman.
Briggs, M. M. *See* Schachat, Canine, Briggs, and Reedy.
Bright, G. R., Fisher, G. W., Rogowska, J., and Taylor, D. L. Fluorescence ratio imaging microscopy: temporal and spatial measurements of cytoplasmic pH. 104:1019.
— *See* DeBiasio, Bright, Ernst, Waggoner, and Taylor.
Brinckerhoff, C. E. *See* Vance, Kowalski, and Brinckerhoff.
Brink, M. *See* André, Brink, Gerisch, Isenberg, Noegel, Schleicher, Segall, and Wallraff.
Brinkley, B. R., Cox, S. M., Pepper, D. A., Wible, L., Brenner, S. L., and Pardue, R. L. Tubulin assembly sites and the organization of cytoplasmic microtubules in cultured mammalian cells. 90:554.
— *See* Balczon and Brinkley.
— *See* Boyd, Bolton, and Brinkley.
— *See* Brenner, Pepper, Berns, Tan, and Brinkley.
— *See* Cabral, Wible, Brenner, and Brinkley.
— *See* Deery and Brinkley.
— *See* Deery, Means, and Brinkley.
— *See* Lin, Dedman, Brinkley, and Means.
— *See* Valdivia and Brinkley.
Brisson, A., and Unwin, P. N. T. Tubular crystals of acetylcholine receptor. 99:1202.
Britton, E. L. *See* Hamati, Britton, and Carey.
Broadwell, R. D., and Oliver, C. Golgi apparatus, GERL, and secretory granule formation within neurons of the hypothalamoneurohypophysial system of control and hyperosmotically stressed mice. 90:474.
Brodie, D. A. Bead rings at the endoplasmic reticulum-Golgi complex boundary: Morphological changes accompanying inhibition of intracellular transport of secretory proteins in arthropod fat body tissue. 90:92.
Brodsky, F. M. Clathrin structure characterized with monoclonal antibodies. I. Analysis of multiple antigenic sites. 101:2047.
— Clathrin structure characterized with monoclonal antibodies. II. Identification of in vivo forms of clathrin. 101:2055.
—, **Holmes, N. J., and Parham, P.** Tropomyosin-like properties of clathrin light chains allow a rapid, high-yield purification. 96:911.
— *See* Blank and Brodsky.
— *See* Mahaffey, Moore, Brodsky, and Anderson.
Brodsky, I. *See* Morgan and Brodsky.
Brodt, P. *See* Blood, Sasse, Brodt, and Zetter.
Brody, J. S., Vaccaro, C. A., Gill, P. J., and Silbert, J. E. Alterations in alveolar basement membranes during postnatal lung growth. 95:394.
— *See* Kagan, Vaccaro, Bronson, Tang, and Brody.
— *See* Vaccaro and Brody.
Broekelmann, T. J. *See* McDonald, Kelley, and Broekelmann.
— *See* Roman, LaChance, Broekelmann, Kennedy, Wayner, Carter, and McDonald.
Brokaw, C. J. A lithium-sensitive regulator of sperm flagellar oscillation is activated by cAMP-dependent phosphorylation. 105:1789.
—, **Luck, D. J. L., and Huang, B.** Analysis of the movement of *Chlamydomonas* flagella: the function of the radial spoke system is revealed by comparison of wild-type and mutant flagella. 92:722.
—, **and Nagayama, S. M.** Modulation of the asymmetry of sea urchin sperm flagellar bending by calmodulin. 100:1875.
— *See* Asai and Brokaw.
— *See* Okuno, Asai, Ogawa and Brokaw.
— *See* Ward, Brokaw, Garbers, and Vacquier.
Bron, R. *See* Knoll, Burger, Bron, van Meer, and Verkleij.
Bronfman, M. *See* Koenig, Dabiké, and Bronfman.
Bronner-Fraser, M. Alterations in neural crest migration by a monoclonal antibody that affects cell adhesion. 101:610.
— Latex beads as probes of a neural crest pathway: effects of laminin, collagen, and surface charge on bead translocation. 98:1947.
—, **and Lallier, T.** A monoclonal antibody against a laminin–heparan sulfate proteoglycan complex perturbs cranial neural crest migration in vivo. 106:1321.
— *See* Krotski, Domingo, and Bronner-Fraser.
Bronson, R. E. *See* Kagan, Vaccaro, Bronson, Tang, and Brody.
Brontoli, M. J. *See* Cramer, Milks, Brontoli, Ojakian, Wright, and Showell.
— *See* Milks, Brontoli, and Cramer.
Broquet, P. *See* Capony, Morisset, Barrett, Capony, Broquet, Vignon, Chambon, Louisot, and Rochefort.
Broschat, K. O. *See* Burgess, Broschat, and Hayden.
Brotschi, E. A. *See* Stendahl, Hartwig, Brotschi, and Stossel.
Broughton, W. J., Wong, C. H., Lewin, A., Samrey, U., Myint, H., Meyer, H., z. A., Dowling, D. N., and Simon, R. Identification of *Rhizobium* plasmid sequences involved in recognition of *Psophocarpus*, *Vigna*, and other legumes. 102:1173.
— *See* Wong, Pankhurst, Kondorosi, and Broughton.
Browder, L. W. *See* Nickells and Browder.
— *See* Nickells, Cavey, and Browder.
Brower, D. L. *See* Giddings, Brower, and Staehelin.

Brown, A. E. *See* Casella, Craig, Maack, and Brown.
Brown, B. A., Nixon, R. A., and Marotta, C. A. Posttranslational processing of α-tubulin during axoplasmic transport in CNS axons. 94:159.
— *See* Nixon, Brown, and Marotta.
Brown, C. C., and Balian, G. Effect of heparin on synthesis of short chain collagen by chondrocytes and smooth muscle cells. 105:1007.
Brown, C. R., von Glos, K. I., and Jones, R. Changes in plasma membrane glycoproteins of rat spermatozoa during maturation in the epididymis. 96:256.
Brown, C. S. *See* Bierer, Herrmann, Brown, Burakoff, and Golan.
— *See* Golan, Brown, Cianci, Furlong, and Caulfield.
Brown, D., Gluck, S., and Hartwig, J. Structure of the novel membrane-coating material in proton-secreting epithelial cells and identification as an H^+ATPase. 105:1637.
— *See* Carpentier, Brown, Iacopetta, and Orci.
— *See* Roth, Brown, and Orci.
Brown, D. J. *See* Witt, Brown, and Gordon.
Brown, D. L. *See* Chaly, Bladon, Setterfield, Little, Kaplan, and Brown.
Brown, D. M. *See* Klein, Brown, Oegema, Brenchley, Anderson, Dickinson, Horigan, and Hassell.
Brown, D. T. *See* Allen, Weiss, Hayden, Brown, Fujiwake, and Simpson.
Brown, E. J. *See* Gresham, Goodwin, Allen, Anderson, and Brown.
Brown, J., Novak, E. K., Takeuchi, K., Moore, K., Medda, S., and Swank, R. T. Lumenal location of the microsomal β-glucuronidase-egasyn complex. 105:1571.
Brown, J. A., Novak, E. K., and Swank, R. T. Effects of ammonia on processing and secretion and precursor and mature lysosomal enzymes from macrophages of normal and pale ear mice: evidence for two distinct pathways. 100:1894.
Brown, J. C., and Salomonsky, N. L. Site-specific maturation of enveloped viruses in L cells treated with cytochalasin B. 100:357.
— *See* Ferris, Brown, Park, and Storrie.
Brown, J. E. *See* Sandvig, Olsnes, Brown, Petersen, and Van Deurs.
Brown, J. H. *See* Meier, Snavely, Brown, Brown, and Insel.
Brown, K. S. *See* Holbrook, Dale, and Brown.
— *See* Takeda, Iwata, Suzuki, Brown, and Kimata.
Brown, M. S. *See* Anderson, Brown, Beisiegel, and Goldstein.
— *See* Anderson, Brown, and Goldstein.
— *See* Carpentier, Gorden, Anderson, Goldstein, Brown, Cohen, and Orci.
— *See* Jingami, Brown, Goldstein, Anderson, and Luskey.
— *See* Pathak, Merkle, Cummings, Goldstein, Brown, and Anderson.
— *See* Schneider, Slaughter, Goldstein, Anderson, Capra, and Brown.
Brown, P. A., and Berlin, R. D. Packing volume of sedimented microtubules: regulation and potential relationship to an intracellular matrix. 101:1492.
— *See* Preston, Regula, Sager, Pearson, Daniels, Brown, and Berlin.
Brown, P. D., and Benya, P. D. Alterations in chondrocyte cytoskeletal architecture during phenotypic modulation by retinoic acid and dihydrocytochalasin B–induced reexpression. 106:171.
— *See* Benya, Brown, and Padilla.
Brown, P. H. *See* Hickman, Theodorakis, Greco, and Brown.
Brown, P. J., and Juliano, R. L. Expression and function of a putative cell surface receptor for fibronectin in hamster and human cell lines. 103:1595.
Brown, P. J. *See* Toda, Taun, Brown, and Grinnell.
Brown, R. M., Jr. *See* Haigler, White, Brown, and Cooper.
— *See* Mueller and Brown.
Brown, S. L. *See* Meier, Snavely, Brown, Brown, and Insel.
Brown, S. S., and Petzold, A. S. Using antibodies against *Dictyostelium* membranes to identify an actin-binding membrane protein. 104:513.
—, **and Spudich, J. A.** Mechanism of action of cytochalasin: Evidence that it binds to actin filament ends. 88:487.
—, **Yamamoto, K., and Spudich, J. A.** A 40,000-dalton protein from *Dictyostelium discoideum* affects assembly properties of actin in a Ca^{2+}-dependent manner. 93:205.
— *See* Stratford and Brown.
Brown, W. *See* Baron, Neff, Brown, Courtoy, Louvard, and Farquhar.
Brown, W. E. *See* Vivarelli, Brown, Whalen, and Cossu.
Brown, W. J., Constantinescu, E., and Farquhar, M. G. Redistribution of mannose-6-phosphate receptors induced by tunicamycin and chloroquine. 99:320.
—, **Goodhouse, J., and Farquhar, M. G.** Mannose-6-phosphate receptors for lysosomal enzymes cycle between the Golgi complex and endosomes. 103:1235.
—, **Shannon, W. A., Jr., and Snell, W. J.** Specific and azurophilic granules from rabbit polymorphonuclear leukocytes. I. Isolation and characterization of membrane and content subfractions. 96:1030.
—, **Shannon, W. A., Jr., and Snell, W. J.** Specific and azurophilic granules from rabbit polymorphonuclear leukocytes. II. Cell surface localization of granule membrane and content proteins before and after degranulation. 96:1040.
Browne, C. L., Lockwood, A. H., Su, J.-L., Beavo, J. A., and Steiner, A. L. Immunofluorescent localization of cyclic nucleotide-dependent protein kinases on the mitotic apparatus of cultured cells. 87:336.
Browning, E. T., and Sanders, M. M. Vimentin: A phosphoprotein under hormonal regulation. 90:803.
Browning, M. *See* Navone, Di Gioia, Jahn, Browning, Greengard, and De Camilli.
Broxterman, H. J. G. *See* Neefjes, Verkerk, Broxterman, van der Marel, van Boom, and Ploegh.
Bruckner, P., Hörler, I., Mendler, M., Houze, Y., Winterhalter, K. H., Eich-Bender, S. G., and Spycher, M. A. Induction and prevention of chondrocyte hypertrophy in culture. 109:2537.
— *See* Mendler, Eich-Bender, Vaughan, Winterhalter, and Bruckner.
— *See* Müller-Glauser, Humbel, Glatt, Sträuli, Winterhalter, and Bruckner.
— *See* Vaughan, Mendler, Huber, Bruckner, Winterhalter, Irwin, and Mayne.
Brugg, B., and Matus, A. PC12 cells express juvenile microtubule-associated proteins during nerve growth factor–induced neurite outgrowth. 107:643.
Brugge, J. S. *See* Erikson, Purchio, Erikson, Collett, and Brugge.
Brümmer, F. *See* Traub, Look, Dermietzel, Brümmer, Hülser, and Willecke.
Brundage, R. *See* Russo, Liotta, Thorgeirsson, Brundage, and Schiffmann.
Brunden, K. R., and Poduslo, J. F. Lysosomal delivery of the major myelin glycoprotein in the absence of myelin assembly: posttranslational regulation of the level of expression by Schwann cells. 104:661.
Brunner, J. *See* Benfenati, Greengard, Brunner, and Bähler.
Bruno, B. *See* Hashimoto, Bruno, Lew, Pozzan, Volpe, and Meldolesi.
Bruno, J. *See* Gordon, Bruno, and Lucas.
Bruns, R. R., Press, W., Engvall, E., Timpl, R., and Gross, J. Type VI collagen in extracellular, 100-nm periodic filaments and fibrils: identification by immunoelectron microscopy. 103:393.
— *See* Heathcote, Bruns, and Orkin.
Brunschwig, J.-P., Brandt, N., Caswell, A. H., and Lukeman, D. S. Ultrastructural observations of isolated intact and fragmented junctions of skeletal muscle by use of tannic acid mordanting. 93:533.
— *See* Caswell and Brunschwig.
— *See* Kawamoto, Brunschwig, Kim, and Caswell.
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Bryan, J. Gelsolin has three actin-binding sites. 106:1553.
—, **and Coluccio, L. M.** Kinetic analysis of F-actin depolymerization in the presence of platelet gelsolin and gelsolin-actin complexes. 101:1236.
—, **and Hwo, S.** Definition of an N-terminal actin-binding domain and a C-terminal Ca^{2+} regulatory domain in human brevin. 102:1439.
— *See* Benson, Bryan, Plant, Gotto, and Smith.
— *See* Carron, Hwo, Dingus, Benson, Meza, and Bryan.
— *See* Cooper, Bryan, Schwab, Frieden, Loftus, and Elson.
— *See* Cooper, Loftus, Frieden, Bryan, and Elson.
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— *See* Hwo and Bryan.
— *See* Rosenfeld, Hou, Dingus, Meza, and Bryan.
— *See* Snabes, Boyd, and Bryan.
Buchanan, M. *See* Snell, Buchanan, and Clausell.
Buchanan, M. J., Imam, S. H., Eskue, W. A., and Snell, W. J. Activation of the cell wall degrading protease, lysin, during sexual signalling in *Chlamydomonas*: the enzyme is stored as an inactive, higher relative molecular mass precursor in the periplasm. 108:199.
— *See* Imam, Buchanan, Shin, and Snell.
— *See* Snell, Eskue, and Buchanan.
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— *See* Neff, Lowrey, Decker, Tovar, Damsky, Buck, and Horwitz.
Buck, C. A., Shea, E., Duggan, K., and Horwitz, A. F. Integrin (the CSAT antigen): functionality requires oligomeric integrity. 103:2421.
— *See* Damsky, Knudsen, Bradley, Buck, and Horwitz.
— *See* Damsky, Knudsen, Dorio, and Buck.
— *See* Solowska, Guan, Marcantonio, Trevithick, Buck, and Hynes.
Buckley, A. *See* Davidson, Klagsbrun, Hill, Buckley, Sullivan, Brewer, and Woodward.
Buckley, I. K., Raju, T. R., and Stewart, M. Claims that intermediate filaments contain F-actin are unwarranted. 90:309.
Buckley, K., and Kelley, R. B. Identification of a transmembrane glycoprotein specific for secretory vesicles of neural and endocrine cells. 100:1284.
Buckley, K. M., Floor, E., and Kelly, R. B. Cloning and sequence analysis of cDNA encoding p38, a major synaptic vesicle protein. 105:2447.
— *See* Matsuuchi, Buckley, Lowe, and Kelly.

Buckley, N. *See* Rougon, Dubois, Buckley, Magnani, and Zollinger.
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Bukusoglu, G. *See* Zieske, Bukusoglu, and Gipson.
Bulger, R. E., Beeuwkes, R., and Saubermann, A. J. Application of scanning electron microscopy to x-ray analysis of frozen-hydrated sections. III. Elemental content of cells in rat renal papillary tip. 88:274.
Bulinski, J. C., and Borisy, G. G. Immunofluorescence localization of HeLa cell microtubule-associated proteins on microtubules in vitro and in vivo. 87:792.
—, **and Borisy, G. G.** Widespread distribution of a 210,000 mol wt microtubule-associated protein in cells and tissues of primates. 87:802.
—, **Richards, J. E., and Piperno, G.** Posttranslational modifications of α tubulin: detyrosination and acetylation differentiate populations of interphase microtubules in cultured cells. 106:1213.
— *See* De Brabander, Bulinski, Geuens, De Mey, and Borisy.
— *See* Geuens, Gundersen, Nuydens, Cornelissen, Bulinski, and De Brabander.
— *See* Gundersen and Bulinski.
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— *See* Schulze, Asai, Bulinski, and Kirschner.
— *See* Wang, Greaser, Schultz, Bulinski, Lin, and Lessard.
— *See* Webster, Gundersen, Bulinski, and Borisy.
Bullard, B. *See* Deatherage, Cheng, and Bullard.
Bullitt, E. S. A., DeRosier, D. J., Coluccio, L. M., and Tilney, L. G. Three-dimensional reconstruction of an actin bundle. 107:597.
Bullivant, S. *See* Gruijters, Kistler, Bullivant, and Goodenough.
— *See* Kistler, Kirkland, and Bullivant.
Bülow, R. *See* Roditi, Schwarz, Pearson, Beecroft, Liu, Richardson, Bühring, Pleiss, Bülow, Williams, and Overath.
Bültmann, B. D., and Gruler, H. Analysis of the directed and nondirected movement of human granulocytes: influence of temperature and ECHO 9 virus on *N*-formylmethionylleucylphenyl-alanine-induced chemokinesis and chemotaxis. 96:1708.
Bumann, J., Wurster, B., and Malchow, D. Attractant-induced changes and oscillations of the extracellular Ca^{++} concentration in suspensions of differentiating *Dictyostelium* cells. 98:173.
Bunge, M. B., Williams, A. K., Wood, P. M., Uitto, J., and Jeffrey, J. J. Comparison of nerve cell and nerve cell plus Schwann cell cultures, with particular emphasis on basal lamina and collagen formation. 84:184.
— *See* Bunge, Bunge, and Bates.
— *See* Eldridge, Bunge, Bunge, and Wood.
— *See* Ratner, Elbein, Bunge, Porter, Bunge, and Glaser.
Bunge, R. P., Bunge, M. B., and Bates, M. Movements of the Schwann cell nucleus implicate progression of the inner (axon-related) Schwann cell process during myelination. 109:273.
— *See* Carey and Bunge.
— *See* Carey, Eldridge, Cornbrooks, Timple, and Bunge.
— *See* Eldridge, Bunge, Bunge, and Wood.
— *See* Johnson, Ross, and Bunge.
— *See* Johnson, Ross, Meyers, Spitznagel, and Bunge.
— *See* Ratner, Bunge, and Glaser.
— *See* Ratner, Elbein, Bunge, Porter, Bunge, and Glaser.
— *See* Ratner, Glaser, and Bunge.
— *See* Salzer and Bunge.
— *See* Salzer, Bunge, and Glaser.
— *See* Salzer, Williams, Glaser, and Bunge.
Bunt, A. H., and Saari, J. C. Fucosylated protein of retinal cone photoreceptor outer segments: morphologic and biochemical analyses. 92:269.
Bunt-Milam, A. H., and Saari, J. C. Immunocytochemical localization of two retinoid-binding proteins in vertebrate retina. 97:703.
Buoniconti, P. *See* Benson, Porter-Jordan, Buoniconti, and Fine.
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— *See* Stallcup, Burakoff, and Mescher.
Burch, W. M., and Lebovitz, H. E. In vitro stimulation of alkaline phosphatase activity in immature embryonic chick pelvic cartilage by adenosine 3′,5′-monophosphate. 93:338.
Burden, S. Identification of an intracellular postsynaptic antigen at the frog neuromuscular junction. 94:521.
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— *See* Baldwin, Yoshihara, Blackmer, Kintner, and Burden.
— *See* Woodruff, Theriot, and Burden.
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— *See* Lotz, Burdsal, Erickson, and McClay.
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Burger, D. E. *See* Kiino, Burger, and Dannies.
Burger, E. H., van der Meer, J. W. M., and Nijweide, P. J. Osteoclast formation from mononuclear phagocytes: role of bone-forming cells. 99:1901.
Burger, K. N. J. *See* Knoll, Burger, Bron, van Meer, and Verkleij.
Burger, M. *See* Spiegel, Burger, and Spiegel.
Burger, M. M. *See* Finne, Burger, and Prieels.
— *See* Mannino, Ballmer, Zeltner, and Burger.
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— *See* Keene, Sakai, Bachinger, and Burgeson.
— *See* Keene, Sakai, Lunstrum, Morris, and Burgeson.
— *See* Sakai, Keene, Morris, and Burgeson.
Burgess, D. R. Reactivation of intestinal epithelial cell brush border motility. ATP-dependent contraction via a terminal web contractile ring. 95:853.
—, **Broschat, K. O., and Hayden, J. M.** Tropomyosin distinguishes between the two actin-binding sites of villin and affects actin-binding properties of other brush border proteins. 104:29.
—, **Jiang W., Mamajiwalla, S., and Kinsey, W.** Intestinal crypt stem cells possess high levels of cytoskeletal-associated phosphotyrosine-containing proteins and tyrosine kinase activity relative to differentiated enterocytes. 109:2139.
—, **and Prum, B. E.** A reevaluation of brush border motility: calcium induces core filament solation and microvillar vesiculation. 94:97.
— *See* Matsudaira and Burgess.
— *See* Stidwill, Wysolmerski, and Burgess.
— *See* Yabkowitz and Burgess.
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Burgess, S. K., Sahyoun, N., Blanchard, S. G., LeVine, H. III, Chang, K.-J., and Cuatrecasas, P. Phorbol ester receptors and protein kinase C in primary neuronal cultures: development and stimulation of endogenous phosphorylation. 102:312.
Burgess, T. L., Craik, C. S., and Kelly, R. B. The exocrine protein trypsinogen is targeted into the secretory granules of an endocrine cell line: studies by gene transfer. 101:639.
—, **Craik, C. S., Matsuuchi, L., and Kelly, R. B.** In vitro mutagenesis of trypsinogen: the role of the amino terminus in intracellular protein targeting to secretory granules. 105:659.
—, **and Kelly, R. B.** Sorting and secretion of adrenocorticotropin in a pituitary tumor cell line after perturbation of the level of a secretory granule-specific proteoglycan. 99:2223.
Burgess, W. H., Watterson, D. M., and Van Eldick, L. J. Identification of calmodulin-binding proteins in chicken embryo fibroblasts. 99:550.
— *See* Keller, Jemiolo, Burgess, and Rebhun.
— *See* Schreiber, Kenney, Kowalski, Thomas, Gimenez-Gallego, Rios-Candelore, Di Salvo, Barritault, Courty, Courtois, Moenner, Loret, Burgess, Mehlman, Friesel, Johnson, and Maciage.
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— *See* Cheek, Jackson, O'Sullivan, Moreton, Berridge, and Burgoyne.
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— *See* Griffiths, Brands, Burke, Louvard, and Warren.
— *See* Hesketh, Beaven, Rogers, Burke, and Warren.
— *See* Kondor-Koch, Burke, and Garoff.
— *See* Tooze and Burke.
— *See* Tooze, Hollinshead, Frank, and Burke.
— *See* Warren, Featherstone, Griffiths, and Burke.
Burke, E. *See* Swanson, Burke, and Silverstein.
Burke, R. E. *See* Gauthier, Burke, Lowey, and Hobbs.
Burland, T. G., Gull, K., Schedl, T., Boston, R. S., and Dove, W. F. Cell type-dependent expression of tubulins in *Physarum*. 97:1852.
— *See* Schedl, Burland, Gull, and Dove.
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Burmer, G. C., Zeigler, C. J., and Norwood, T. H. Evidence for endogenous polypeptide-mediated inhibition of cell cycle transit in human diploid cells. 94:187.
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Burnett, K. G., and Scheffler, I. E. Integrity of mitochondria in a mammalian cell mutant defective in mitochondrial protein synthesis. 90:108.
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— *See* Ingraham, Burns, Boxer, Baehner, and Haak.
Burns, G. F., Lucas, C. M., Krissansen, G. W., Werkmeister, J. A., Scanlon, D. B., Simpson, R. J., and Vadas, M. A. Synergism between membrane gangliosides and Arg-Gly-Asp–directed glycoprotein receptors in attachment to matrix proteins by melanoma cells. 107:1225.
Burnside, B., and Ackland, N. Calcium-independent contraction in lysed

cell models of teleost retinal cones: activation by unregulated myosin light chain kinase or high magnesium and loss of cAMP inhibition. 105:397.
—, **Smith, B., Nagata, M., and Porrello, K.** Reactivation of contraction in detergent-lysed teleost retinal cones. 92:199.
— *See* Gilson, Ackland, and Burnside.
— *See* O'Connor and Burnside.
— *See* Porrello and Burnside.
— *See* Porrello, Cande, and Burnside.
— *See* Troutt and Burnside.
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—, **and Burr, B.** Three mutations in *Zea mays* affecting zein accumulation: a comparison of zein polypeptides, in vitro synthesis and processing, mRNA levels, and genomic organization. 94:201.
Burridge, K., and Connell, L. A new protein of adhesion plaques and ruffling membranes. 97:359.
—, **Kelley, T., and Mangeat, P.** Nonerythrocyte spectrins: actin-membrane attachment proteins occurring in many cell types. 95:478.
— *See* Mangeat and Burridge.
— *See* Phillips, Burridge, Wilson, and Kirshner.
— *See* Tidball, O'Halloran, and Burridge.
Burrini, A. G. *See* Baccetti, Burrini, Pallini, and Renieri.
Burstein, D. E., Seeley, P. J., and Greene, L. A. Lithium ions inhibit nerve growth factor-induced neurite outgrowth and phosphorylation of nerve growth factor-modulated microtubule-associated proteins. 101:862.
Bursztajn, S., Berman, S. A., McManaman, J. L., and Watson, M. L. Insertion and internalization of acetylcholine receptors at clustered and diffuse domains on cultured myotubes. 101:104.
—, **and Fischbach, G. D.** Evidence that coated vesicles transport acetylcholine receptors to the surface membrane of chick myotubes. 98:498.
—, **McManaman, J. L., and Appel, S. H.** Organization of acetylcholine receptor clusters in cultured rat myotubes is calcium dependent. 98:507.
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Burton, P. R. Luminal material in microtubules of frog olfactory axons: structure and distribution. 99:520.
Burwen, S. J., Barker, M. E., Goldman, I. S., Hradek, G. T., Raper, S. E., and Jones, A. L. Transport of epidermal growth factor by rat liver: evidence for a nonlysosomal pathway. 99:1259.
Busa, W. B., Ferguson, J. E., Joseph, S. K., Williamson, J. R., and Nuccitelli, R. Activation of frog (*Xenopus laevis*) eggs by inositol trisphosphate. I. Characterization of Ca^{2+} release from intracellular stores. 101:677.
—, **and Nuccitelli, R.** An elevated free cytosolic Ca^{2+} wave follows fertilization in eggs of the frog, *Xenopus laevis*. 100:1325.
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Busson-Mabillot, S., Chambaut-Guérin, A.-M., Ovtracht, L., Muller, P., and Rossignol, B. Microtubules and protein secretion in rat lacrimal glands: localization of short-term effects of colchicine on the secretory process. 95:105.
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— *See* Kleinschmidt, Scheer, Dabauvalle, Bustin, and Franke.
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— *See* Picker, Nakache, and Butcher.
— *See* Streeter, Rouse, and Butcher.
— *See* Wu, Jalkanen, Streeter, and Butcher.
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— *See* Dennerll, Lamoureux, Buxbaum, and Heidemann.
— *See* Joshi, Chu, Buxbaum, and Heidemann.
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—, **Dubreuil, R., Branton, D., Kiehart, D. P., and Goldstein, L. S. B.** *Drosophila* spectrin. II. Conserved features of the alpha-subunit are revealed by analysis of cDNA clones and fusion proteins. 105:2103.
—, **Husain-Chishti, A., Dubreuil, R. R., Branton, D., and Goldstein, L. S. B.** Sequence similarity of the amino-terminal domain of *Drosophila* beta spectrin to alpha actinin and dystrophin. 109:1633.
— *See* Dubreuil, Byers, Branton, Goldstein, and Kiehart.
— *See* Dubreuil, Byers, Sillman, Bar-Zvi, Goldstein, and Branton.
— *See* Pesacreta, Byers, Dubreuil, Kiehart, and Branton.
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— *See* Fletcher and Byus.

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— *See* Molano, Bowers, and Cabib.
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— *See* Abraham, Marcus, Cabral, and Gottesman.
— *See* Brady, Cabral, and Dedman.
— *See* Schibler and Cabral.
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Cajot, J.-F., Schleuning, W.-D., Medcalf, R. L., Bamat, J., Testuz, J., Liebermann, L., and Sordat, B. Mouse L cells expressing human prourokinase-type plasminogen activator: effects on extracellular matrix degradation and invasion. 109:915.
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— *See* Sugahara, Caldwell, and Mason.
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— *See* Lai, Cameron, Wada, Doherty, Kay, Posner, and Bergeron.
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Campbell, E. J., and Campbell, M. A. Pericellular proteolysis by neutro-

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— *See* Jorgensen and Campbell.
— *See* Jorgensen, Shen, Arnold, Leung, and Campbell.
— *See* Jorgensen, Shen, and Campbell.
— *See* Jorgensen, Shen, Campbell, and MacLennan.
Campbell, M. A. *See* Campbell and Campbell.
Campbell, S. C., and Schwartz, N. B. Kinetics of intracellular processing of chondroitin sulfate proteoglycan core protein and other matrix components. 106:2191.
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Cancalon, P. Proximodistal degeneration of C-fibers detached from their perikarya. 97:6.
— Slow flow in axons detached from their perikarya. 95:991.
—, **and Elam, J. S.** Study of regeneration in the garfish olfactory nerve. 84:779.
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— *See* Castagnola, Moro, Descalzi-Cancedda, and Cancedda.
— *See* De Luca, D'Anna, Bondanza, Franzi, and Cancedda.
— *See* Descalzi Cancedda, Manduca, Tacchetti, Fossa, Quarto, and Cancedda.
— *See* Tacchetti, Quarto, Nitsch, Hartmann, and Cancedda.
Cande, W. Z. A permeabilized cell model for studying cytokinesis using mammalian tissue culture cells. 87:326.
—, **and McDonald, K.** Physiological and ultrastructural analysis of elongating mitotic spindles reactivated in vitro. 103:593.
—, **McDonald, K., and Meeusen, R. L.** A permeabilized cell model for studying cell division: A comparison of anaphase chromosome movement and cleavage furrow constriction in lysed PtK_1 cells. 88:618.
—, **Tooth, P. J., and Kendrick-Jones, J.** Regulation of contraction and thick filament assembly-disassembly in glycerinated vertebrate smooth muscle cells. 97:1062.
— *See* Hollenbeck, Suprynowicz, and Cande.
— *See* Masuda, McDonald, and Cande.
— *See* Meeusen, Bennett, and Cande.
— *See* Porrello, Cande, and Burnside.
— *See* Wordeman, McDonald, and Cande.
Canine, A. C. *See* Schachat, Canine, Briggs, and Reedy.
Canipari, R., O'Connell, M. L., Meyer, G., and Strickland, S. Mouse ovarian granulosa cells produce urokinase-type plasminogen activator, whereas the corresponding rat cells produce tissue-type plasminogen activator. 105:977.
Cannon, S., Wang, P., and Roy, H. Inhibition of ribulose biphosphate carboxylase assembly by antibody to a binding protein. 103:1327.
Cantini, M., Sartore, S., and Schiaffino, S. Myosin types in cultured muscle cells. 85:903.
— *See* Carraro, Morale, Mussini, Lucke, Cantini, Betto, Catani, Dalla Libera, Betto, and Noventa.
Cantino, M., and Squire, J. Resting myosin cross-bridge configuration in frog muscle thick filaments. 102:610.
Cantley, L. *See* Bridges, Levenson, Housman, and Cantley.
Cantley, L. G. *See* English, Macara, and Cantley.
Cantor, C. R. *See* Murphy, Powers, and Cantor.
Cantor, H. *See* Galli, Dvorak, Marcum, Ishizaka, Nabel, Der Simonian, Pyne, Goldin, Rosenberg, Cantor, and Dvorak.
Capco, D. G., Krochmalnic, G., and Penman, S. A new method of preparing embeddment-free sections for transmission electron microscopy: applications to the cytoskeletal framework and other three-dimensional networks. 98:1873.
—, **and Penman, S.** Mitotic architecture of the cell: the filament networks of the nucleus and cytoplasm. 96:896.
— *See* Bement and Capco.
Capetanaki, Y., Smith, S., and Heath, J. P. Overexpression of the vimentin gene in transgenic mice inhibits normal lens cell differentiation. 109:1653.
Capetanaki, Y. G. *See* Ngai, Capetanaki, and Lazarides.
Capiau, C. *See* Lambotte, Falmagne, Capiau, Zamen, Ruysschaert, and Dirkx.
Caplan, A. I. *See* Pechak, Carrino, and Caplan.
Caplan, M. J. *See* Sztul, Biemesderfer, Caplan, Kashgarian, and Boyer.
Capony, F., Morisset, M., Barrett, A. J., Capony, J. P., Broquet, P., Vignon, F., Chambon, M., Louisot, P., and Rochefort, H. Phosphorylation, glycosylation, and proteolytic activity of the 52-kD estrogen-induced protein secreted by MCF_7 cells. 104:253.
Capony, J. P. *See* Capony, Morisset, Barrett, Capony, Broquet, Vignon, Chambon, Louisot, and Rochefort.
— *See* Picard, Capony, Brautigan, and Dorée.
Caporale, C. *See* Adamo, Caporale, Nervi, Ceci, and Molinaro.
Capps, G. G., Van Kampen, M., Ward, C. L., and Zúñiga, M. C. Correction. 109:1381.
—, **Van Kampen, M., Ward, C. L., and Zúñiga, M. C.** Endocytosis of the class I major histocompatibility antigen via a phorbolmyristate acetate–inducible pathway is a lymphocyte-specific phenomenon and requires the cytoplasmic domain. 108:1317.
Cappuccinelli, P. *See* Rubino, Fighetti, Unger, and Cappuccinelli.
Capra, J. D. *See* Schneider, Slaughter, Goldstein, Anderson, Capra, and Brown.
Caput, D. *See* Drubin, Caput, and Kirschner.
Caras, I. W., Weddell, G. N., and Williams, S. R. Analysis of the signal for attachment of a glycophospholipid membrane anchor. 108:1387.
— *See* Lisanti, Caras, Davitz, and Rodriguez-Boulan.
Carbon, J. *See* Bloom, Amaya, Carbon, Clarke, Hill, and Yeh.
Carbon, S. *See* Gajdusek, Carbon, Ross, Nawroth, and Stern.
Carboni, J. *See* Garcia, Coudrier, Carboni, Anderson, Vandekerkhove, Mooseker, Louvard, and Arpin.
Carboni, J. M., and Condeelis, J. S. Ligand-induced changes in the location of actin, yosin, 95K (α-actinin), and 120K protein in amebae of *Dictyostelium discoideum.* 100:1884.
—, **Conzelman, K. A., Adams, R. A., Kaiser, D. A., Pollard, T. D., and Mooseker, M. S.** Structural and immunological characterization of the myosin-like 110-kD subunit of the intestinal microvillar 110K-calmodulin complex: evidence for discrete myosin head and calmodulin-binding domains. 107:1749.
— *See* Shibayama, Carboni, and Mooseker.
Cardarelli, P. M., Crispe, I. N., and Pierschbacher, M. D. Preferential expression of fibronectin receptors on immature thymocytes. 106:2183.
—, **and Pierschbacher, M. D.** Identification of fibronectin receptors on T lymphocytes. 105:499.
Cardell, E. L. *See* Cardell, Michaels, Hung, and Cardell.
Cardell, R. R., Jr., Michaels, J. E., Hung, J. T., and Cardell, E. L. SERGE, the subcellular site of initial hepatic glycogen deposition in the rat: a radioautographic and cytochemical study. 101:201.
Cardelli, J. A., Golumbeski, G. S., and Dimond, R. L. Lysosomal enzymes in *Dictyostelium discoideum* are transported to lysosomes at distinctly different rates. 102:1264.
— *See* Ebert, Freeze, Richardson, Dimond, and Cardelli.
— *See* Mierendorf, Cardelli, and Dimond.
— *See* Richardson, Woychik, Ebert, Dimond, and Cardelli.
Cardwell, M. C., and Rome, L. H. Evidence that an RGD-dependent receptor mediates the binding of oligodendrocytes to a novel ligand in a glial-derived matrix. 107:1541.
—, **and Rome, L. H.** RGD-containing peptides inhibit the synthesis of myelin-like membrane by cultured oligodendrocytes. 107:1551.
Caretta, A., and Saibil, H. Visualization of cyclic nucleotide binding sites in the vertebrate retina by fluorescence microscopy. 108:1517.
Carew, E. A. *See* Anderson, Van Itallie, Peterson, Stevenson, Carew, and Mooseker.
Carey, D. J., and Bunge, R. P. Factors influencing the release of proteins by cultured Schwann cells. 91:666.
—, **Eldridge, C. F., Cornbrooks, C. J., Timpl, R., and Bunge, R. P.** Biosynthesis of type IV collagen by cultured rat Schwann cells. 97:473.
—, **and Evans, D. M.** Membrane anchoring of heparan sulfate proteoglycans by phosphatidylinositol and kinetics of synthesis of peripheral and detergent-solubilized proteoglycans in Schwann cells. 108:1891.
—, **Rafferty, C. M., and Todd, M. S.** Effects of inhibition of proteoglycan synthesis on the differentiation of cultured rat Schwann cells. 105:1013.
—, **Todd, M. S., and Rafferty, C. M.** Schwann cell myelination: induction by exogenous basement membrane-like extracellular matrix. 102:2254.
— *See* Hamati, Britton, and Carey.
— *See* Mehta, Orphe, Todd, Cornbrooks, and Carey.
Carley, W. W., Barak, L. S., and Webb, W. W. F-actin aggregates in transformed cells. 90:797.
— *See* Peters, Carley, and Palade.
Carlin, R. K., Bartelt, D. C., and Siekevitz, P. Identification of fodrin as a major calmodulin-binding protein in postsynaptic density preparations. 96:443.
—, **Grab, D. J., Cohen, R. S., and Siekevitz, P.** Isolation and characterization of postsynaptic densities from various brain regions: enrichment of different types of postsynaptic densities. 86:831.
—, **Grab, D. J., and Siekevitz, P.** Function of calmodulin in postsynaptic densities. III. Calmodulin-binding proteins of the post-synaptic density. 89:449.
— *See* Bartelt, Carlin, Scheele, and Cohen.
— *See* Grab, Carlin, and Sickevitz.

Carlone, D. *See* Goetinck, Stirpe, Tsonis, and Carlone.
Carlson, N., and Rechsteiner, M. Microinjection of ubiquitin: intracellular distribution and metabolism in HeLa cells maintained under normal physiological conditions. 104:537.
—, Rogers, S., and Rechsteiner, M. Microinjection of ubiquitin: changes in protein degradation in HeLa cells subjected to heat-shock. 104:547.
Carlson, S. *See* Madara, Barenberg, and Carlson.
Carlson, S. S., Caroni, P., and Kelly, R. B. A nerve terminal anchorage protein from electric organ. 103:509.
—, and Kelly, R. B. An antiserum specific for cholinergic synaptic vesicles from electric organ. 87:98.
—, and Wight, T. N. Nerve terminal anchorage protein 1 is a chondroitin sulfate proteoglycan: biochemical and electron microscopic characterization. 105:3075.
— *See* Hooper, Carlson, and Kelly.
Carlsson, L. *See* Blikstad and Carlsson.
Carne, T. *See* Scheele, Jacoby, and Carne.
Carnemolla, B., Balza, E., Siri, A., and Zardi, L. A tumor-associated fibronectin isoform generated by alternative splicing of messenger RNA precursors. 108:1139.
— *See* Borsi, Carnemolla, Castellani, Rosellini, Vecchio, Allemanni, Chang, Taylor-Papadimitriou, Pande, and Zardi.
— *See* Mugnai, Lewandowska, Carnemolla, Zardi, and Culp.
Carney, D. H., and Bergmann, J. S. ^{125}I-Thrombin binds to clustered receptors on noncoated regions of mouse embryo cell surfaces. 95:697.
— *See* Ball, Carney, Albrecht, Asai, and Thompson.
— *See* Frost, Thompson, and Carney.
— *See* Thompson, Asai, and Carney.
Caron, J. M., Jones, A. L., and Kirschner, M. W. Autoregulation of tubulin synthesis in hepatocytes and fibroblasts. 101:1763.
Caroni, P., and Schwab, M. E. Two membrane protein fractions from rat central myelin with inhibitory properties for neurite growth and fibroblast spreading. 106:1281.
— *See* Carlson, Caroni, and Kelly.
— *See* Paganetti, Caroni, and Schwab.
Carothers Carraway, C. A. *See* Jung, Helm, Carothers Carraway, and Carraway.
Carpenter, G. *See* Stoscheck and Carpenter.
Carpenter, M. P. *See* Hui, Stewart, Carpenter, and Stewart.
Carpentier, J.-L., Brown, D., Iacopetta, B., and Orci, L. Detection of surface-bound ligands by freeze-fracture autoradiography. 101:887.
—, Gazzano, H., van Obberghen, E., Fehlmann, M., Freychet, P., and Orci, L. Intracellular pathway followed by the insulin receptor covalently coupled to ^{125}I-photoreactive insulin during internalization and recycling. 102:989.
—, Gorden, P., Anderson, R. G. W., Goldstein, J. L., Brown, M. S., Cohen, S., and Orci, L. Co-localization of ^{125}I-epidermal growth factor and ferritin-low density lipoprotein in coated pits: a quantitative electron microscopic study in normal and mutant human fibroblasts. 95:73.
—, Obberghen, E. V., Gorden, P., and Orci, L. Surface redistribution of ^{125}I-insulin in cultured human lymphocytes. 91:17.
—, White, M. F., Orci, L., and Kahn, C. R. Direct visualization of the phosphorylated epidermal growth factor receptor during its internalization in A-431 cells. 105:2751.
— *See* Barazzone, Lesniak, Gorden, Van Obberghen, Carpentier, and Orci.
— *See* Fehlmann, Carpentier, Le Cam, Thamm, Saunders, Brandenburg, Orci, and Freychet.
— *See* Iacopetta, Carpentier, Pozzan, Lew, Gorden, and Orci.
Carr, C., Fischbach, G. D., and Cohen, J. B. A novel 87,000-M_r protein associated with acetylcholine receptors in *Torpedo* electric organ and vertebrate skeletal muscle. 109:1753.
— *See* Bridgman, Carr, Pedersen, and Cohen.
— *See* Musil, Carr, Cohen, and Merlie.
Carraro, U., Morale, D., Mussini, I., Lucke, S., Cantini, M., Betto, R., Catani, C., Dalla Libera, L., Betto, D. D., and Noventa, D. D. Chronic denervation of rat hemidiaphragm: maintenance of fiber heterogeneity with associated increasing uniformity of myosin isoforms. 100:161.
Carraway, C. A. C. *See* Carraway, Cerra, Jung, and Carraway.
Carraway, K. L., Cerra, R. F., Jung, G., and Carraway, C. A. C. Membrane-associated actin from the microvillar membranes of Ascites tumor cells. 94:624.
— *See* Jung, Helm, Carothers Carraway, and Carraway.
Carrell, N. *See* Erickson, Carrell, and McDonagh.
Carrington, J. L., Roberts, A. B., Flanders, K. C., Roche, N. S., and Reddi, A. H. Accumulation, localization, and compartmentation of transforming growth factor β during endochondrial bone development. 107:1969.
Carrino, D. A. *See* Pechak, Carrino, and Caplan.
Carrino, J. J., and Laffler, T. G. The effects of heat shock on the cell cycle regulation of tubulin expression in *Physarum polycephalum*. 100:642.
—, and Laffler, T. G. Transcription of α-tubulin and histone H4 genes begins at the same point in the *Physarum* cell cycle. 102:1666.
Carroll, R. C. *See* Cox, Carroll, White, and Rao.
— *See* Wheeler, Gerrard, and Carroll.
Carron, C. P., Hwo, S., Dingus, J., Benson, D. M., Meza, I., and Bryan, J. A re-evaluation of cytoplasmic gelsolin localization. 102:237.
Carson, D. D. Tang, J.-P., Julian, J., and Glasser, S. R. Vectorial secretion of proteoglycans by polarized rat uterine epithelial cells. 107:2425.
— *See* Farach-Carson, Carson, Collier, Lennarz, Park, and Wright.
— *See* Glasser, Julian, Decker, Tang, and Carson.
Carson, M., Weber, A., and Zigmond, S. H. An actin-nucleating activity in polymorphonuclear leukocytes is modulated by chemotactic peptides. 103:2707.
Cartaud, A., Courvalin, J. C., Ludosky, M. A., and Cartaud, J. Presence of a protein immunologically related to lamin B in the postsynaptic membrane of *Torpedo marmorata* electrocyte. 109:1745.
Cartaud, J., Sobel, A., Rousselet, A., Devaux, P. F., and Changeux, J. P. Consequences of alkaline treatment for the ultrastructure of the acetylcholine-receptor-rich membranes from *Torpedo marmorata* electric organ. 90:418.
— *See* Cartaud, Courvalin, Ludosky, and Cartaud.
— *See* Kordeli, Cartaud, Nghiêm, Devillers-Thiéry, and Changeux.
— *See* Kordeli, Cartaud, Nghiêm, Pradel, Dubreuil, Paulin, and Changeux.
Carter, J. G. *See* Martin, Schmidt, DiStefano, Lowry, Carter, and Johnson.
Carter, V. C., Howlett, A. R., Martin, G. S., and Bissell, M. J. The tyrosine phosphorylation substrate p36 is developmentally regulated in embryonic avian limb and is induced in cell culture. 103:2017.
— *See* Radke, Carter, Moss, Dehazya, Schliwa, and Martin.
Carter, W. G. The role of intermolecular disulfide bonding in deposition of GP140 in the extracellular matrix. 99:105.
—, Rauvala, H., and Hakomori, S.-I. Studies on cell adhesion and recognition. II. The kinetics of cell adhesion and cell spreading on surfaces coated with carbohydrate-reactive proteins (glycosidases and lectins) and fibronection. 88:138.
— *See* Languino, Gehlsen, Wayner, Carter, Engvall, and Ruoslahti.
— *See* Rauvala, Carter, and Hakomori.
— *See* Roman, LaChance, Broekelmann, Kennedy, Wayner, Carter, and McDonald.
— *See* Staatz, Rajpara, Wayner, Carter, and Santoro.
— *See* Trüeb, Lewis, and Carter.
— *See* Wayner and Carter.
— *See* Wayner, Carter, Piotrowicz, and Kunicki.
— *See* Wayner, Garcia-Pardo, Humphries, McDonald, and Carter.
Carver, J. P. *See* Dennis, Carver, and Schachter.
— *See* Stanley, Sudo, and Carver.
Case, S. T. *See* Dreesen, Lezzi, and Case.
— *See* Kao and Case.
Casella, J. F., Craig, S. W., Maack, D. J., and Brown, A. E. Cap Z(36/32), a barbed end actin-capping protein, is a component of the Z-line of skeletal muscle. 105:371.
Casey, D. L. *See* Epstein, Berliner, Casey, and Ortiz.
Cashmore, A. R. *See* Schmidt, Bartlett, Grossman, Cashmore, and Chua.
Caspar, D. L. D. *See* Baker, Caspar, Hollingshead, and Goodenough.
— *See* Hollingshead, Caspar, Melchior, and Kirschner.
Cassab, G. I., and Varner, J. E. Immunocytolocalization of extensin in developing soybean seed coats by immunogold–silver staining and by tissue printing on nitrocellulose paper. 105:2581.
Cassel, D. *See* Whitely, Glaser, Zhuang, and Cassel.
Cassiman, J.-J. *See* David, Lories, Heremans, Van Der Schueren, Cassiman, and Van Den Berghe.
— *See* Heremans, Van Der Schueren, De Cock, Paulsson, Cassiman, Van Den Berghe, and David.
Cassimeris, L., Pryer, N. K., and Salmon, E. D. Real-time observations of microtubule dynamic instability in living cells. 107:2223.
— *See* Rieder, Davison, Jensen, Cassimeris, and Salmon.
Cassimeris, L. U., Wadsworth, P., and Salmon, E. D. Dynamics of microtubule depolymerization in monocytes. 102:2023.
Cassio, D. *See* Bouhnik, Cassio, Coezy, Corvol, and Weiss.
Castagnola, P., Dozin, B., Moro, G., and Cancedda, R. Changes in the expression of collagen genes show two stages in chondrocyte differentiation in vitro. 106:461.
—, Moro, G., Descalzi-Cancedda, F., and Cancedda, R. Type X collagen synthesis during in vitro development of chick embryo tibial chondrocytes. 102:2310.
Castellani I. *See* Colombatti, Bressan, Castellani, and Volpin.
Castellani, L., and Hardwicke, P. M. D. Crystalline structure of sarcoplasmic reticulum from scallop. 97:557.

—, **Hardwicke, P. M. D., and Franzini-Armstrong, C.** Effect of Ca^{2+} on the dimeric structure of scallop sarcoplasmic reticulum. 108:511.
— *See* Cohen, Reinhardt, Castellani, Norton, and Stirewalt.
— *See* Vibert and Castellani.
Castellani, P., Siri, A., Rosellini, C., Infusini, E., Borsi, L., and Zardi, L. Transformed human cells release different fibronectin variants than do normal cells. 103:1671.
— *See* Borsi, Carnemolla, Castellani, Rosellini, Vecchio, Allemanni, Chang, Taylor-Papadimitriou, Pande, and Zardi.
Castello, C. *See* Quillen, Castello, Krishan, and Rubin.
Castellot, J. J., Addonizio, M. L., Rosenberg, R., and Karnovsky, M. J. Cultured endothelial cells produce a heparinlike inhibitor of smooth muscle cell growth. 90:372.
Castellot, J. J., Jr., Choay, J., Lormeau, J.-C., Petitou, M., Sache, E., and Karnovsky, M. J. Structural determinants of the capacity of heparin to inhibit the proliferation of vascular smooth muscle cells. II. Evidence for a pentasaccharide sequence that contains a 3-0-sulfate group. 102:1979.
—, **Pukac, L. A., Caleb, B. L., Wright, T. C., Jr., Karnovsky, M. J.** Heparin selectively inhibits a protein kinase C–dependent mechanism of cell cycle progression in calf aortic smooth muscle cells. 109:3147.
—, *See* Robinson, Okada, Castellot, and Karnovsky.
Castle, C. K. *See* Majack, Castle, Goodman, Weisgraber, Mahley, Shooter, and Gebicke-Haerter.
Castle, J. D. *See* Arvan and Castle.
— *See* Cameron, Cameron, and Castle.
— *See* von Zastrow and Castle.
Caswell, A. H., and Brunschwig, J.-P. Identification and extraction of proteins that compose the triad junction of skeletal muscle. 99:929.
— *See* Brunschwig, Brandt, Caswell, and Lukeman.
— *See* Cadwell and Caswell.
— *See* Kawamoto, Brunschwig, Kim, and Caswell.
Catani, C. *See* Carraro, Morale, Mussini, Lucke, Cantini, Betto, Catani, Dalla Libera, Betto, and Noventa.
Caterson, B. *See* Fife, Caterson, and Myers.
Cato, A. C. B., and Weinmann, J. Mineralocorticoid regulation of transcription of transfected mouse mammary tumor virus DNA in cultured kidney cells. 106:2119.
Catterall, J. F., Stein, J. P., Kristo, P., Means, A. R., and O'Malley, B. W. Primary sequence of ovomucoid messenger RNA as determined from cloned complementary DNA. 87:480.
Cattini, P. *See* Allan, Cowling, Harborne, Cattini, Craigie, and Gould.
Cauley, K., Agranoff, B. W., and Goldman, D. Identification of a novel nicotinic acetylcholine receptor structural subunit expressed in goldfish retina. 108:637.
Caulfield, J. P., and Cianci, C. M. L. Human erythrocytes adhering to schistosomula of *Schistosoma mansoni* lyse and fail to transfer membrane components to the parasite. 101:158.
—, **Korman, G., Butterworth, A. E., Hogan, M., and David, J. R.** Partial and complete detachment of neutrophils and eosinophils from schistosomula: evidence for the establishment of continuity between a fused and normal parasite membrane. 86:64
—, **Korman, G., Butterworth, A. E., Hogan, M., and David, J. R.** The adherence of human neutrophils and eosinophils to schistosomula: evidence for membrane fusion between cells and parasites. 86:46.
—, **Korman, G., and Samuelson, J. C.** Human neutrophils endocytose multivalent ligands from the surface of schistosomula of *Schistosoma mansoni* before membrane fusion. 94:370.
—, **Lewis, R. A., Hein, A., and Austen, K. F.** Secretion in dissociated human pulmonary mast cells. Evidence for solubilization of granule contents before discharge. 85:299.
— *See* Golan, Brown, Cianci, Furlong, and Caulfield.
— *See* Peattie, Alonso, Hein, and Caulfield.
— *See* Samuelson and Caulfield.
— *See* Samuelson, Caulfield, and David.
Caulton, J. H. *See* Fuller, Caulton, Hutchens, Kaufman, and Raff.
Cavagnaro, J., Pierce, D. A., Lucchesi, J. C., and Chae, C.-B. Association of a protease with polytene chromosomes of *Drosophila melanogaster*. 87:415.
Caveney, S. *See* Safranyos and Caveney.
Cavey, M. J. *See* Nickells, Cavey, and Browder.
Cebra, J. J. *See* Fechheimer and Cebra.
Ceccarelli, B., and Hurlbut, W. P. Ca^{2+}-dependent recycling of synaptic vesicles at the frog neuromuscular junction. 87:297.
— *See* Haimann, Torri-Tarelli, Fesce, and Ceccarelli.
— *See* Torri-Tarelli, Grohovaz, Fesce, and Ceccarelli.
— *See* Valtorta, Jahn, Fesce, Greengard, and Ceccarelli.
— *See* Valtorta, Madeddu, Meldolesi, and Ceccarelli.
Ceci, R. *See* Adamo, Caporale, Nervi, Ceci, and Molinaro.
Celati, C. *See* Bornens, Paintrand, and Celati.
Celis, A. *See* Celis, Larsen, Fey, and Celis.
Celis, J. E., Larsen, P. M., Fey, S. J., and Celis, A. Phosphorylation of keratin and vimentin polypeptides in normal and transformed mitotic human epithelial amnion cells: behavior of keratin and vimentin filaments during mitosis. 97:1429.
— *See* Bravo and Celis.
— *See* Bravo, Fey, Larsen, Coppard, and Celis.
— *See* Madsen, Nielsen, and Celis.
Cerami, A. *See* Sherry and Cerami.
Cereijido, M. *See* Martinez-Palomo, Meza, Beaty, and Cereijido.
— *See* Meza, Ibarra, Sabanero, Martinez-Palomo, and Cereijido.
— *See* Salas, Misek, Vega-Salas, Gundersen, Cereijido, and Rodriguez-Boulan.
Ceriotti, A., and Colman, A. Protein transport from endoplasmic reticulum to the Golgi complex can occur during meiotic metaphase in *Xenopus* oocytes. 109:1439.
Cerny, L. *See* Grove, Cerny, Perriard, and Eppenberger.
Cerny, L. C., and Bandman, E. Contractile activity is required for the expression of neonatal myosin heavy chain in embryonic chick pectoral muscle cultures. 103:2153.
Cerra, R. F., Haywood-Reid, P. L., and Barondes, S. H. Endogenous mammalian lectin localized extracellularly in lung elastic fibers. 98:1580.
— *See* Bois, Roberson, Haywood-Reid, Cerra, and Barondes.
— *See* Carraway, Cerra, Jung, and Carraway.
Cha, C. Y. *See* Markelonis, Oh, Park, Cha, Sofia, Kim, and Azari.
Chadwick, C. *See* Costello, Chadwick, Saito, Chu, Maurer, and Fleischer.
Chae, C.-B. *See* Cavagnaro, Pierce, Lucchesi, and Chae.
Chafouleas, J. *See* Maihle, Dedman, Means, Chafouleas, and Satir.
Chafouleas, J. G. *See* Simmen, Dunbar, Guerriero, Chafouleas, Clark, and Means.
Chagnon, E. *See* Duperray, Berthier, Chagnon, Ryckewaert, Ginsberg, Plow, and Marguerie.
Chaikin, M. A. *See* Singh, Chaikin, Pledger, Scher, and Stiles.
— *See* Singh. Chaikin, and Stiles.
Chaitin, M. H., Schneider, B. G., Hall, M. O., and Papermaster, D. S. Actin in the photoreceptor connecting cilium: immunocytochemical localization to the site of outer segment disk formation. 99:239.
Chakravarti, S. *See* Durkin, Chakravarti, Bartos, Liu, Friedman, and Chung.
Chalfie, M., and Thomson, J. N. Structural and functional diversity in the neuronal microtubules of *Caenorhabditis elegans*. 93:15.
— *See* Driscoll, Dean, Reilly, Bergholz, and Chalfie.
Chaly, N., Bladon, T., Setterfield, G., Little, J. E., Kaplan, J. G., and Brown, D. L. Changes in distribution of nuclear matrix antigens during the mitotic cell cycle. 99:661.
Chambard, M., Gabrion, J., and Mauchamp, J. Influence of collagen gel on the orientation of epithelial cell polarity: follicle formation from isolated thryoid cells and from preformed monolayers. 91:157.
—, **Verrier, B., Gabrion, J., and Maunchamp, J.** Polarization of thryoid cells in culture: evidence for the basolateral localization of the iodide pump and of the thyroid-stimulating hormone receptor-adenyl cyclase complex. 96:1172.
Chambaut-Guérin, A.-M. *See* Busson-Mabillot, Chambaut-Guérin, Ovtracht, Muller, and Rossignol.
Chamberlain, J. W., Pollard, J. W., and Stanners, C. P. Selective synthesis of mitochondrial proteins by Chinese hamster ovary cells severely starved for various amino acids. 98:1603.
Chambers, K. A. *See* Hartwig, Chambers, Hopcia, and Kwiatkowski.
— *See* Hartwig, Chambers, and Stossel.
Chambon, M. *See* Capony, Morisset, Barrett, Capony, Broquet, Vignon, Chambon, Louisot, and Rochefort.
Chamley-Campbell, J. H., Campbell, G. R., and Ross, R. Phenotype-dependent response of cultured aortic smooth muscle to serum mitogens. 89:379.
Chandler, D. E., and Heuser, J. The vitelline layer of the sea urchin egg and its modification during fertilization. A freeze-fracture study using quick-freezing and deepetching. 84:618.
—, **and Heuser, J. E.** Arrest of membrane fusion events in mast cells by quick-freezing. 86:666
—, **Witaker, M., and Zimmerberg, J.** High molecular weight polymers block cortical granule exocytosis in sea urchin eggs at the level of granule matrix disassembly. 109:1269.
— *See* Larabell and Chandler.
Chandler, H. J. *See* Lane and Chandler.
Chaney, W., Sundaram, S., Friedman, N., and Stanley, P. The Lec4A CHO glycosylation mutant arises from miscompartmentalization of a Golgi glycosyltransferase. 109:2089.
Chang, A., and Jamieson, J. D. Stimulus–secretion coupling in the developing exocrine pancreas: secretory responsiveness to cholecystokinin. 103:2353.

Chang, C. C. Y. *See* Cadigan, Chang, and Chang.
Chang, K.-J. *See* Burgess, Sahyoun, Blanchard, LeVine, Chang, and Cuatrecasas.
Chang, L.-Y., Slot, J. W., Geuze, H. J., and Crapo, J. D. Molecular immunocytochemistry of the CuZn superoxide dismutase in rat hepatocytes. 107:2169.
Chang, S., Rathjen, F. G., and Raper, J. A. Extension of neurites on axons is impaired by antibodies against specific neural cell glycoproteins. 104:355.
Chang, S. E. *See* Borsi, Carnemolla, Castellani, Rosellini, Vecchio, Allemanni, Chang, Taylor-Papadimitriou, Pande, and Zardi.
Chang, T. S. K. *See* Zirkin, Chang, and Heaps.
Chang, T.-D. *See* Meyers, Spengler, Chang, Melera, and Biedler.
Chang, T.-Y. *See* Cadigan, Chang, and Chang.
Chang, X., and Piperno, G. Cross-reactivity of antibodies specific for flagellar tektin and intermediate filament subunits. 104:1563.
— *See* Piperno, LeDizet, and Chang.
Changeux, J. P. *See* Cartaud, Sobel, Rousselet, Devaux, and Changeux.
Changeux, J.-P. *See* Fontaine and Changeux.
— *See* Fontaine, Klarsfeld, and Changeux.
— *See* Kordeli, Cartaud, Nghiêm, Devillers-Thiéry, and Changeux.
— *See* Kordeli, Cartaud, Nghiêm, Pradel, Dubreuil, Paulin, and Changeux.
Chanson, M. *See* Pepper, Spray, Chanson, Montesano, Orci, and Meda.
Chantler, P. D. Calcium-dependent association of a protein complex with the lymphocyte plasma membrane: probable identity with calmodulin-calcineurin. 101:207.
— *See* Levine, Chantler, and Kensler.
Chantret, I. *See* Trugnan, Rousset, Chantret, Barbat, and Zweibaum.
Chapel, A. *See* Tranqui, Andrieux, Hudry-Clergeon, Ryckewaert, Soyez, Chapel, Ginsberg, Plow, and Marguerie.
Chapman, A. B., Knight, D. M., and Ringold, G. M. Glucocorticoid regulation of adipocyte differentiation: hormonal triggering of the developmental program and induction of a differentiation-dependent gene. 101:1227.
Chapman, K. *See* Hollenbeck and Chapman.
Chaponnier, C., Janmey, P. A., and Yin, H. L. The actin filament–severing domain of plasma gelsolin. 103:1473.
— *See* Clowes, Clowes, Kocher, Ropraz, Chaponnier, and Gabbiani.
— *See* Lind, Janmey, Chaponnier, Herbert, and Stossel.
Chappell, T. G., and Warren, G. A galactosyltransferase from the fission yeast *Schizosaccharomyces pombe*. 109:2693.
— *See* Rubenstein and Chappell.
Charonis, A. S. Skubitz, A. P. N., Koliakos, G. G., Reger, L., Dege, J., Vogel, A. M., Wohlhueter, R., and Furcht, L. T. A novel synthetic peptide from the B1 chain of laminin with heparin-binding and cell adhesion-promoting activities. 107:1253.
—, **Tsilibary, E. C., Saku, T., and Furthmayr, H.** Inhibition of laminin self-assembly and interaction with type IV collagen by antibodies to the terminal domain of the long arm. 103:1689.
—, **Tsilibary, E. C., Yurcheno, P. D., and Furthmayr, H.** Binding of laminin to type IV collagen: a morphological study. 100:1848.
— *See* Tsilibary and Charonis.
Charp, P. A., Kinders, R. J., and Johnson, T. C. G_2 cell cycle arrest induced by glycopeptides isolated from the bovine cerebral cortex. 97:311.
Chasan, R. *See* Hirokawa, Keller, Chasan, and Mooseker.
— *See* Keller, Conzelman, Chasan, and Mooseker.
— *See* Sheetz, Chasan, and Spudich.
Chasis, J. A., and Mohandas, N. Erythrocyte membrane deformability and stability: two distinct membrane properties that are independently regulated by skeletal protein associations. 103:343.
—, **Reid, M. E., Jensen, R. H., and Mohandas, N.** Signal transduction by glycophorin A: role of extracellular and cytoplasmic domains in a modulatable process. 107:1351.
Chatila, T. A., Geha, R. S., and Arnaout, M. A. Constitutive and stimulus-induced phosphorylation of CD11/CD18 leukocyte adhesion molecules. 109:3435.
Chau, V. *See* Roher, Palmer, Chau, and Ball.
Cheek, T. R., Jackson, T. R., O'Sullivan, A. J., Moreton, R. B., Berridge, M. J., and Burgoyne, R. D. Simultaneous measurements of cytosolic calcium and secretion in single bovine adrenal chromaffin cells by fluorescent imaging of Fura-2 in cocultured cells. 109:1219.
Cheifetz, S. *See* Andres, Stanley, Cheifetz, and Massagué.
Chen, B. D.-M. *See* Van Zant and Chen.
Chen, C., Bonifacino, J. S., Yuan, L. C., and Klausner, R. D. Selective degradation of T cell antigen receptor chains retained in a pre-Golgi compartment. 107:2149.
Chen, C. S., Thiagarajan, P., Schwartz, S. M., Harlan, J. M., and Heimark, R. L. The platelet glycoprotein IIb/IIIa–like protein in human endothelial cells promotes adhesion but not initial attachment to extracellular matrix. 105:1885.
Chen, J. W., Murphy, T. L., Willingham, M. C., Pastan, I., and August, J. T. Identification of two lysosomal membrane glycoproteins. 101:85.
Chen, J.-M., and Little, C. D. Cells that emerge from embryonic explants produce fibers of type IV collagen. 101:1175.
— *See* Chen, Chen, and Mueller.
Chen, L. B. *See* Hsieh and Chen.
— *See* Hsieh, Segal, and Chen.
— *See* Johnson, Walsh, Bockus, and Chen.
— *See* Summerhayes, Cheng, Sun, and Chen.
— *See* Terasaki, Chen, and Fujiwara.
Chen, Q. *See* Moens, Heyting, Dietrich, van Raamsdonk, and Chen.
Chen, S., and Bouck, G. B. Endogenous glycosyltransferases glycosylate lipids in flagella of *Euglena*. 98:1825.
— *See* Nicholson, Chen, Blanck, and Pollack.
Chen, T.-Y., and Merisko, E. M. Annulate lamellae: comparison of antigenic epitopes of annulate lamellae membranes with the nuclear envelope. 107:1299.
Chen, W.-T. Mechanism of retraction of the trailing edge during fibroblast movement. 90:187.
—, **Chen, J.-M., and Mueller, S. C.** Coupled expression and colocalization of 140K cell adhesion molecules, fibronectin, and laminin during morphogenesis and cytodifferentiation of chick lung cells. 103:1073.
—, **Hasegawa, E., Hasegawa, T., Weinstock, C., and Yamada, K. M.** Development of cell surface linkage complexes in cultured fibroblasts. 100:1103.
—, **Olden, K., Bernard, B. A., and Chu, F.-F.** Expression of transformation-associated protease(s) that degrade fibronectin at cell contact sites. 98:1546.
—, **and Singer, S. J.** Immunoelectron microscopic studies of the sites of cell-substratum and cell-cell contacts in cultured fibroblasts. 95:205.
—, **Wang, J., Hasegawa, T., Yamada, S. S., and Yamada, K. M.** Regulation of fibronectin receptor distribution by transformation, exogenous fibronectin, and synthetic peptides. 103:1649.
— *See* Akiyama, Yamada, Chen, and Yamada.
— *See* Duband, Rocher, Chen, Yamada, and Thiery.
— *See* Mueller, Kelly, Dai, Dai, and Chen
— *See* Saga, Nagata, Chen, and Yamada.
Cheney, J. M. *See* Covault, Cheney, and Sanes.
Cheng, J. *See* Gospodarowicz, Cheng, and Lirette.
Cheng, K.-L. *See* Fulton, Cheng, and Lai.
Cheng, N., and Deatherage, J. F. Three-dimensional reconstruction of the Z disk of sectioned bee flight muscle. 108:1761.
— *See* Deatherage, Cheng, and Bullard.
Cheng, T. P.-O., Byrd, F. I., Whitaker, J. N., and Wood, J. G. Immunocytochemical localization of coated vesicle protein in rodent nervous system. 86:624.
Cheng, T. P. O., and Reese, T. S. Polarized compartmentalization of organelles in growth cones from developing optic tectum. 101:1473.
Cheng, Y.-S. *See* Summerhayes, Cheng, Sun, and Chen.
—, *See* Satter, Garber, Khairallah, and Cheng.
Chentsov, Y. S. *See* Amchenkova, Bakeeva, Chentsov, Skulachev, and Zorov.
— *See* Vorobjev and Chentsov.
Cheresh, D. A., and Klier, F. G. Disialoganglioside GD_2 distributes preferentially into substrate-associated microprocesses on human melanoma cells during their attachment to fibronectin. 102:1887.
—, **Pierschbacher, M. D., Herzig, M. A., and Mujoo, K.** Disialogangliosides GD2 and GD3 are involved in the attachment of human melanoma and neuroblastoma cells to extracellular matrix proteins. 102:688.
—, **Pytela, R., Pierschbacher, M. D., Klier, F. G., Ruoslahti, E., and Reisfeld, R. A.** An arg-gyl-asp–directed receptor on the surface of human melanoma cells exists in a divalent cation–dependent functional complex with the disialoganglioside GD2. 105:1163.
— *See* Schindler, Meiners, and Cheresh.
Chernoff, E. A. G., Maresh, G. A., and Culp, L. A. Isolation and characterization of a large, neurite-associated glycoconjugate from Neuroblastoma cells. 96:661.
Cheung, A. *See* Penningroth, Cheung, Olehnik, and Koslosky.
Cheung, M. K., Drivas, D. T., Littau, V. C., and Johnson, E. M. Protein tightly bound near the termini of the *Physarum* extrachromosomal rDNA palindrome. 91:309.
Cheung, W. Y. *See* Cooper, McLaughlin, Tallant, and Cheung.
— *See* Wood, Wallace, Whitaker, and Cheung.
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Chevance, G. *See* Pfeiffer, Jakob, Mikoshiba, Dubois, Guenet, Nicolas, Gaillard, Chevance, and Jacob.
Chi, M. *See* Natowicz, Hallett, Frier, Chi, Schlesinger, and Baenziger.
Chia, C. P., and Arntzen, C. J. Evidence for two-step processing of nuclear-encoded chloroplast proteins during membrane assembly. 103:725.

Chia, G. H. *See* Horwitz, Chia, Harracksingh, Orlow, Pifko-Hirst, Schneck, Sorbara, Speaker, and Wilk.
Chiang, A. *See* Sadler, Chiang, Kurihara, Rothblatt, Way, and Silver.
Chicheportiche, Y., Vassalli, P., and Tartakoff, A. M. Characterization of cytoplasmically oriented Golgi proteins with a monoclonal antibody. 99:2200.
Chicoine, L. *See* Allis, Allen, Wiggins, Chicoine, and Richman.
Chicoine, L. G., Richman, R., Cook, R. G., Gorovsky, M. A., and Allis, C. D. A single histone acetyltransferase from *Tetrahymena* macronuclei catalyzes deposition-related acetylation of free histones and transcription-related acetylation of nucleosomal histones. 105:127.
— *See* Richman, Chicoine, Collini, Cook, and Allis.
Chien, S. *See* Handley, Arbeeny, Eder, and Chien.
— *See* Sung, Kabat, and Chien.
Chiesi, M., Ho, M. M., Inesi, G., Somlyo, A. V., and Somlyo, A. P. Primary role of sarcoplasmic reticulum in phasic contractile activation of cardiac myocytes with shunted myolemma. 91:728.
Child, F. M. *See* Oliver, Osborne, Pfeiffer, Child, and Berlin.
Chilton, B. S., Nicosia, S. V., Sowinski, J. M., and Wolf, D. P. Isolation and characterization of rabbit endocervical cells. 86:172.
Chin, J. R. *See* Werb and Chin.
Chin, N. W., and Lanks, K. W. Use of immobilized lactoperoxidase to label L cell proteins involved in adhesion to polystyrene. 85:402.
— *See* Lanks and Chin.
Chin, S. S. M. *See* Napolitano, Pachter, Chin, and Liem.
Chin-Bow, S. *See* Saide, Chin-Bow, Hogan-Sheldon, Busquets-Turner, Vigoreaux, Valgeirsdottir, and Pardue.
Chinkers, M., McKanna, J. A., and Cohen, S. Rapid rounding of human epidermoid carcinoma cells A-431 induced by epidermal growth factor. 88:422.
Chipman, S. D. *See* Gerstenfeld, Chipman, Kelly, Hodgens, Lee, and Landis.
Chiquet, M., and Fambrough, D. M. Chick myotendinous antigen. I. A monoclonal antibody as a marker for tendon and muscle morphogenesis. 98:1926.
—, and Fambrough, D. M. Chick myotendinous antigen. II. A novel extracellular glycoprotein complex consisting of large disulfide-linked subunits. 98:1937.
—, Masuda-Nakagawa, L., and Beck, K. Attachment to an endogenous laminin-like protein initiates sprouting by leech neurons. 107:1189.
Chiquet-Ehrismann, R. *See* Aufderheide, Chiquet-Ehrismann, and Ekblom.
— *See* Mackie, Thesleff, and Chiquet-Ehrismann.
Chirgwin, J. M. *See* Faust, Chirgwin, and Kornfeld.
Chirico, W. J. *See* Waters, Chirico, and Blobel.
Chitnis, P. R., Harel, E., Kohorn, B. D., Tobin, E. M., and Thornber, J. P. Assembly of the precursor and processed light-harvesting chlorophyll *a/b* protein of *Lemna* into the light-harvesting complex II of barley etiochloroplasts. 102:982.
— *See* Kohorn, Harel, Chitnis, Thornber, and Tobin.
Chiu, A. Y., Matthew, W. D., and Patterson, P. H. A monoclonal antibody that blocks the activity of a neurite regeneration-promoting factor: studies on the binding site and its localization in vivo. 103:1383.
Cho, A. *See* Siu, Cho, and Choi.
Choate, J. *See* Loftus, Choate, and Albrecht.
Choay, J. *See* Castellot, Choay, Lormeau, Petitou, Sache, and Karnovsky.
Choi, A. H. C., and Siu, C.-H. Filopodia are enriched in a cell cohesion molecule of M_r 80,000 and participate in cell–cell contact formation in *Dictyostelium discoideum*. 104:1375.
— *See* Siu, Cho, and Choi.
Choi, H. *See* Poole, Pidoux, Reiner, Choi, and Rosenberg.
— *See* Spray, Fujita, Saez, Choi, Wanatabe, Hertzberg, Rosenberg, and Reid.
Choi, H. U. *See* Lewandowska, Choi, Rosenberg, Zardi, and Culp.
Choi, Y. D., and Dreyfuss, G. Monoclonal antibody characterization of the C proteins of heterogenous nuclear RNPs in vertebrate cells. 99:1997.
Choi, Y. S., and Gumbiner, B. Expression of cell adhesion molecule E-cadherin in *Xenopus* embryos begins at gastrulation and predominates in the ectoderm. 108:2449.
Chojnacki, B. *See* Wright, Chojnacki, and Jarvik.
Choppin, P. W. *See* Roos and Choppin.
Chou, C.-S. *See* Lin, Helfman, Hughes, and Chou.
Chou, D. K. H. *See* Künemund, Jungalwala, Fischer, Chou, Keilhauer, and Schachner.
Chou, J. Y., Mano, T., and Feldman, M. Inhibition of synthesis of α-fetoprotein by glucocorticoids in cultured hepatoma cells. 93:314.
—, and Schlegel-Haueter, S. E. Study of liver differentiation in vitro. 89:216.
Chow, D. C. *See* Skosey, Chow, Nusinow, May, Gestautas, and Niwa.
Chow, I., and Poo, M. Redistribution of cell surface receptors induced by cell–cell contact. 95:510.
Chowrashi, P. K., and Pepe, F. A. The Z-band: 85,000-dalton amorphin and alpha actinin and their relation to structure. 94:565
Chrétien, P. *See* Landry, Chrétien, Lambert, Hickey, and Weber.
Chrispeels, M. J., Higgins, T. J. V., Craig, S., and Spencer, D. Role of the endoplasmic reticulum in the synthesis of reserve proteins and the kinetics of their transport to protein bodies in developing pea cotyledons. 93:5.
—, Higgins, T. J. V., and Spencer, D. Assembly of storage protein oligomers in the endoplasmic reticulum and processing of the polypeptides in the protein bodies of developing pea cotyledons. 93:306.
— *See* Bollini, Vitale, and Chrispeels.
— *See* Dorel, Voelker, Herman, and Chrispeels.
— *See* Tauge and Chrispeels.
— *See* Vitale and Chrispeels.
Christensen, A. K. *See* Mori and Christensen.
Christensen, H. *See* de Harven, Leung, and Christensen.
Christensen, M. E., LeStoureon, W. M., Jamrich, M., Howard, G. C., Serunian, L. A., Silver, L. M., and Elgin, S. C. R. Distribution studies on polytene chromosomes using antibodies directed against hnRNP. 90:18.
Christian, C. N. *See* Axelrod, Bauer, Stya, and Christian.
— *See* Prives, Fulton, Penman, Daniels, and Christian.
Christiansson, A., Kuypers, F. A., Roelofsen, B., Op den Kamp, J. A. F., and van Deenen, L. L. M. Lipid molecular shape affects erythrocyte morphology: a study involving replacement of native phosphatidylcholine with different species followed by treatment of cells with sphingomyelinase C or phospholipase A_2. 101:1455.
Christie, D. L. *See* Stirzaker, Whitfeld, Christie, Bellamy, and Both.
Christman, J. K., Weich, N., Schoenbrun, B., Schneiderman, N., and Acs, G. Hypomethylation of DNA during differentiation of Friend erythroleukemia cells. 86:366.
Christner, J. *See* Hedman, Christner, Julkunen, and Vaheri.
Chu, A. *See* Costello, Chadwick, Saito, Chu, Maurer, and Fleischer.
— *See* Saito, Seiler, Chu, and Fleischer.
Chu, D. *See* Heidemann, Hamborg, Thomas, Song, Lindley, and Chu.
— *See* Joshi, Chu, Buxbaum, and Heidemann.
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Chu, L.-Y. *See* Wasmuth and Chu.
Chua, N. H. *See* Schmidt, Bartlett, Grossman, Cashmore, and Chua.
Chudzik, J. *See* Ohkuma, Chudzik, and Poole.
Chuman, L., Fine, L. G., Cohen, A. H., and Saier, M. H., Jr. Continuous growth of proximal tubular kidney epithelial cells in hormone-supplemented serum-free medium. 94:506.
Chun, J. J. M., and Shatz, C. J. A fibronectin-like molecule is present in the developing cat cerebral cortex and is correlated with subplate neurons. 106:857.
Chun, M., and Falkenthal, S. *Ifm(2)2* is a myosin heavy chain allele that disrupts myofibrillar assembly only in the indirect flight muscle of *Drosophila melanogaster*. 107:2615.
Chung, A. E. *See* Durkin, Chakravarti, Bartos, Liu, Friedman, and Chung.
— *See* Wan, Wu, Chung, and Damjanov.
Chung, J. *See* Yancey, Koh, Chung, and Revel.
Chung, L. W. K. *See* Neubauer, Chung, McCormick, Taguchi, Thompson, and Cunha.
Chung, S. D., Alavi, N., Livingston, D., Hiller, S., and Taub, M. Characterization of primary rabbit kidney cultures that express proximal tubule functions in a hormonally defined medium. 95:118.
Chung, S.-Y. *See* Lothstein, Arenstorf, Chung, Walker, Wall, Wooley, and LeStourgeon.
Chuong, C.-M., Crossin, K. L., and Edelman, G. M. Sequential expression and differential function of multiple adhesion molecules during the formation of cerebellar cortical layers. 104:331.
—, and Edelman, G. M. Expression of cell-adhesion molecules in embryonic induction. I. Morphogenesis of nestling feathers. 101:1009.
—, and Edelman, G. M. Expression of cell-adhesion molecules in embryonic induction. II. Morphogenesis of adult feathers. 101:1027.
— *See* Hoffman, Friedlander, Chuong, Grumet, and Edelman.
Church, K., and Lin, H.-P. P. Meiosis in *Drosophila melanogaster*. II. The prometaphase-I kinetochore microtubule bundle and kinetochore orientation in males. 93:365.
—, Nicklas, R. B., and Lin, H.-P. P. Micromanipulated bivalents can trigger mini-spindle formation in *Drosophila melanogaster* spermatocyte cytoplasm. 103:2765.
Chytil, F. *See* Liau, Ong, and Chytil.
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— *See* Golan, Brown, Cianci, Furlong, and Caulfield.
Cibelli, G. *See* Gennarini, Cibelli, Rougon, Mattei, and Goridis.
Ciment, G., Ressler, A., Letourneau, P. C., and Weston, J. A. A novel intermediate filament–associated protein, NAPA-73, that binds to differ-

ent filament types at different stages of nervous system development. 102:246.
Cirillo, D. *See* Marchisio, Cirillo, Naldini, Primavera. Teti, and Zambonin-Zallone.
Cissel, D. S. *See* Flanders, Thompson, Cissel, Van Obberghen-Schilling, Baker, Kass, Ellingsworth, Roberts, and Sporn.
Citi, S., Cross, R. A., Bagshaw, C. R., and Kendrick-Jones, J. Parallel modulation of brush border myosin conformation and enzyme activity induced by monoclonal antibodies. 109:549.
— *See* Höner, Citi, Kendrick-Jones, and Jockusch.
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Clapper, D. L., Davis, J. A., Lamothe, P. J., Patton, C., and Epel, D. Involvement of zinc in the regulation of pH_i, motility, and acrosome reactions in sea urchin sperm. 100:1817.
Clark, B. A. *See* Okagaki, Clark, and Twiggs.
Clark, C. C., Crossland, J., Kaplan, G., and Martinez-Hernandez, A. Location and identification of the collagen found in the 14.5-d rat embryo visceral yolk sac. 93:251.
— *See* Amenta, Clark, and Martinez-Hernandez.
Clark, J. H. *See* Simmen, Dunbar, Guerriero, Chafouleas, Clark, and Means.
Clark, J. M., Vaughan, D. W., Aiken, B. M., and Kagan, H. M. Elastase-like enzymes in human neutrophils localized by ultrastructural cytochemistry. 84:102.
Clark, M. A. *See* Godfrey, Manzi, Clark, and Hoffstein.
Clark, M. W., and Abelson, J. The subnuclear localization of tRNA ligase in yeast. 105:1515.
Clark, R. A. *See* Borregaard, Heiple, Simons, and Clark.
Clark, R. A. F. *See* Singer, Kawka, Kazazis, and Clark.
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Clarke, D. *See* Keller, Scallen, Clarke, Maher, Krisans, and Singer.
Clarke, H. J., and Masui, Y. Dose-dependent relationship between oocyte cytoplasmic volume and transformation of sperm nuclei to metaphase chromosomes. 104:831.
—, **and Masui, Y.** Transformation of sperm nuclei to metaphase chromosomes in the cytoplasm of maturing oocytes of the mouse. 102:1039.
Clarke, L. *See* Bloom, Amaya, Carbon, Clarke, Hill, and Yeh.
Clarke, M. *See* Kayman and Clarke.
— *See* Kayman, Reichel, and Clarke.
Claudio, T., Paulson, H. L., Green, W. N., Ross, A. F., Hartman, D. S., and Hayden, D. Fibroblasts transfected with *Torpedo* acetylcholine receptor β-, γ-, and δ-subunit cDNAs express functional receptors when infected with a retroviral α recombinant. 108:2277.
Clausell, A. *See* Snell, Buchanan, and Clausell.
— *See* Snell, Clausell, and Moore.
— *See* Snell, Kosfiszer, Clausell, Perillo, Imam, and Hunnicutt.
Clawson, G. A., MacDonald, J. R., and Woo, C. H. Early hypomethylation of 2′-O-ribose moieties in hepatocyte cytoplasmic ribosomal RNA underlies the protein synthetic defect produced by CCl_4. 105:705.
Clayton, C. E. Import of fructose biphosphate aldolase into the glycosomes of *Trypanosoma brucei*. 105:2649.
Clayton, L., Black, C. M., and Lloyd, C. W. Microtubule nucleating sites in higher plant cells identified by an auto-antibody against pericentriolar material. 101:319.
Clegg, C. H., and Hauschka, S. D. Heterokaryon analysis of muscle differentiation: regulation of the postmitotic state. 105:937.
—, **Linkhart, T. A., Olwin, B. B., and Hauschka, S. D.** Growth factor control of skeletal muscle differentiation: commitment to terminal differentiation occurs in G_1 phase and is repressed by fibroblast growth factor. 105:949.
Clegg, D. O., Helder, J. C., Hann, B. C., Hall, D. E., and Reichardt, L. F. Amino acid sequence and distribution of mRNA encoding a major skeletal muscle laminin binding protein: an extracellular matrix-associated protein with an unusual COOH-terminal polyaspartate domain. 107:699.
Clementi, F. *See* Sher, Denis-Donini, Zanini, Bisiani, and Clementi.
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—, **and Havercroft, J. C.** Is apparent autoregulatory control of tubulin synthesis nontranscriptionally regulated? 97:919.
— *See* Earnshaw, Sullivan, Machlin, Cooke, Kaiser, Pollard, Rothfield, and Cleveland.
— *See* Havercroft and Cleveland.
— *See* Joshi and Cleveland.
— *See* Joshi, Yen, and Cleveland.
— *See* Lopata and Cleveland.
— *See* Monteiro and Cleveland.
— *See* Pittenger and Cleveland.
— *See* Sullivan and Cleveland.
Cleves, A. E., Novick, P. J., and Bankaitis, V. A. Mutations in the *SAC1* gene suppress defects in yeast Golgi and yeast actin function. 109:2939.
Clevinger, B. *See* Oursler, Bell, Clevinger, and Osdoby.
Clinton, G. M., and Finley-Whelan, J. Tyrosyl kinases acquired from anchorage-independent cells by a membrane-enveloped virus. 99:788.
Cloney, R. A. *See* Koonce, Cloney, and Berns.
Clowes, A. W., Clowes, M. M., Kocher, O., Ropraz, P., Chaponnier, C., and Gabbiani, G. Arterial smooth muscle cells in vivo: relationship between actin isoform expression and mitogenesis and their modulation by heparin. 107:1939.
Clowes, M. M. *See* Clowes, Clowes, Kocher, Ropraz, Chaponnier, and Gabbiani.
Cluzeaud, F. *See* Triller, Cluzeaud, and Korn.
— *See* Triller, Cluzeaud, Pfeiffer, Betz, and Korn.
Coade, S. *See* Segal, Dorling, and Coade.
Coats, S. *See* Winningham-Major, Staecker, Barger, Coats, and Van Eldik.
Cochrane, C. G. *See* Jesaitis, Naemura, Sklar, Cochrane, and Painter.
Cockcroft, S., Howell, T. W., and Gomperts, B. D. Two G-proteins act in series to control stimulus-secretion coupling in mast cells: use of neomycin to distinguish between G-proteins controlling polyphosphoinositide phosphodiesterase and exocytosis. 105:2745.
— *See* Howell, Cockcroft, and Gomperts.
Cocking-Johnson, D. *See* Sauk, Krumweide, Cocking-Johnson, and White.
Coezy, E. *See* Bouhnik, Cassio, Coezy, Corvol, and Weiss.
Coffey, D. S. *See* Simons, Noga, Colombani, Beschorner, Coffey, and Hess.
Coffino, P. *See* McConlogue, Marton, and Coffino.
Cohen, A. H. *See* Chuman, Fine, Cohen, and Saier.
Cohen, A. I. *See* Andrews and Cohen.
Cohen, B. N. *See* McCue, Gubler, Sherman, and Cohen.
Cohen, C., Reinhardt, B., Castellaini, L., Norton, P., and Stirewalt, M. Schistosome surface spines are "crystals" of actin. 95:989.
Cohen, C. M., and Foley, S. F. Spectrin-dependent and -independent association of F-actin with the erythrocyte membrane. 86:694.
Cohen, D. *See* Nir, Cohen, and Papermaster.
Cohen, F. S., Akabas, M. H., Zimmerberg, J., and Finkelstein, A. Parameters affecting the fusion of unilamellar phospholipid vesicles with planar bilayer membranes. 98:1053.
— *See* Akabas, Cohen, and Finkelstein.
Cohen, H. J. *See* Newburger, Pagano, Greenberger, Karpas, and Cohen.
Cohen, I., Gerrard, J. M., and White, J. G. Ultrastructure of clots during isometric contraction. 93:775.
Cohen, J. *See* Beisson, Cohen, Lefort-Tran, Pouphile, and Rossignol.
Cohen, J. B. *See* Bridgman, Carr, Pedersen, and Cohen.
— *See* Carr, Fischbach, and Cohen.
— *See* Musil, Carr, Cohen, and Merlie.
— *See* St. John, Froehner, Goodenough, and Cohen.
Cohen, M. W., and Weldon, P. R. Localization of acetylcholine receptors and synaptic ultrastructure at nerve-muscle contacts in culture: dependence on nerve type. 86:388.
Cohen, R. J. *See* Feldherr, Cohen, and Ogburn.
Cohen, R. S. *See* Carlin, Grab, Cohen, and Siekevitz.
Cohen, S. *See* Carpentier, Gorden, Anderson, Goldstein, Brown, Cohen, and Orci.
— *See* Chinkers, McKanna, and Cohen.
— *See* Grinstein, Cohen, Goetz, and Rothstein.
Cohen, S. R. *See* Omlin, Webster, Palkovits, and Cohen.
Cohen, W. D., Bartelt, D., Jaeger, R., Langford, G., and Nemhauser, I. The cytoskeletal system of nucleated erythrocytes. I. Composition and function of major elements. 93:828.
—, **and Nemhauser, I.** Association of centrioles with the marginal band of a molluscan erythrocyte. 86:286.
— *See* Bartelt, Carlin, Scheele, and Cohen.
— *See* Joseph-Silverstein and Cohen.
— *See* Nemhauser, Joseph-Silverstein, and Cohen.
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— *See* Detmers, Wright, Olsen, Kimball, and Cohn.
— *See* Kielian and Cohn.
— *See* Kielian, Steinman, and Cohn.
— *See* Mellman, Plutner, Steinman, Unkeless, and Cohn.
— *See* Mellman, Steinman, Unkeless, and Cohn.
— *See* Muller, Steinman, and Cohn.
— *See* Steinman, Mellman, Muller, and Cohn.
Colbaugh, P. A., Stookey, M., and Draper, R. K. Impaired lysosomes in a temperature-sensitive mutant of Chinese hamster ovary cells.

108:2211.
Colca, J. R. *See* Kaplan, Colca, and McDaniel.
Cole, G. J., and Glaser, L. A heparin-binding domain from N-CAM is involved in neural cell–substratum adhesion. 102:403.
—, **and Glaser, L.** Cell-substratum adhesion in embryonic chick central nervous system is mediated by a 170,000-mol-wt neural-specific polypeptide. 99:1605.
—, **Loewy, A., Cross, N. V., Akeson, R., and Glaser, L.** Topographic localization of the heparin-binding domain of the neural cell adhesion molecule N-CAM. 103:1739.
—, **Schubert, D., and Glaser, L.** Cell-substratum adhesion in chick neural retina depends upon protein–heparan sulfate interactions. 100:1192.
Cole, P. *See* Leonard, Gorham, Cole, Greene, and Ziff.
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— *See* Dejana, Colella, Languino, Balconi, Corbascio, and Marchisio.
Coleman, A. W. *See* Goff and Coleman.
Coleman, J. R. *See* Konieczny, Lawrence, and Coleman.
Coleman, T. R., Harris, A. S., Miche, S. M., Mooseker, M. S., and Morrow, J. S. Beta spectrin bestows protein 4.1 sensitivity on spectrin–actin interactions. 104:519.
—, **and Mooseker, M. S.** Effects of actin filament crosslinking and filament length on actin–myosin interaction. 101:1850.
— *See* Mooseker and Coleman.
— *See* Mooseker, Conzelman, Coleman, Heuser, and Sheetz.
Coles, L. S. *See* Winter, Palatnik, Williams, Coles, Wells, and Gordon.
Coller, B. S. Activation affects access to the platelet receptor for adhesive glycoproteins. 103:451.
Collett, M. S. *See* Erikson, Purchio, Erikson, Collett, and Brugge.
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Collier, N. C., Heuser, J., Levy, M. A., and Schlesinger, M. J. Ultrastructural and biochemical analysis of the stress granule chicken embryo fibroblasts. 106:1131.
—, **and Schlesinger, M. J.** The dynamic state of heat shock proteins in chicken embryo fibroblasts. 103:1495.
Collin-Osdoby, P., and Adair, W. S. Characterization of the purified *Chlamydomonas minus* agglutinin. 101:1144.
— *See* Goodenough, Adair, Collin-Osdoby, and Heuser.
Collini, M. P. *See* Richman, Chicoine, Collini, Cook, and Allis.
Collins, C. A., and Vallee, R. B. Temperature-dependent reversible assembly of taxol-treated microtubules. 105:2847.
Collins, J. M., and Foster, K. A. Differentiation of promyelocytic (HL-60) cells into mature granulocytes: mitochondrial-specific rhodamine 123 fluorescence. 96:94.
Collins, P. *See* Connolly, Collins, and Gilmore.
Colman, A., Jones, E. A., and Heasman, J. Meiotic maturation in *Xenopus* oocytes: a link between the cessation of protein secretion and the polarized disappearance of Golgi apparati. 101:313.
—, **Morser, J., Lane, C., Besley, J., Wylie, C., and Valle, G.** Fate of secretory proteins trapped in oocytes of *Xenopus laevis* by disruption of cytoskeleton or by imbalanced subunit synthesis. 91:770.
— *See* Ceriotti and Colman.
— *See* Drummond, McCrae, and Colman.
Colman, D. R., Kreibich, G., Frey, A. B., and Sabatini, D. D. Synthesis and incorporation of myelin polypeptides into CNS myelin. 95:598.
— *See* Harnik-Ort, Prakash, Marcantonio, Colman, Rosenfeld, Adesnik, Sabatini, and Kreibich.
— *See* Salzer, Holmes, and Colman.
Colman, R. W. *See* Gustafson, Lukasiewicz, Wachtfogel, Norton, Schmaier, Niewiarowski, and Colman.
Colombani, P. M. *See* Simons, Noga, Colombani, Beschorner, Coffey, and Hess.
Colombatti, A., Bressan, G. M., Castellani, I., and Volpin, D. Gp115, a glycoprotein isolated from chick blood vessels, is widely distributed in connective tissue. 100:18.
Colozzo, M. *See* Steinberg, Smith, Colozzo, and Pollack.
Coltoff-Schiller, B. *See* Schwartz, Bienkowski, Coltoff-Schiller, Goldfischer, and Blumenfeld.
Coluccio, L. M., and Bretscher, A. Calcium-regulated cooperative binding of the microvillar 110K-calmodulincomplex to F-actin: formation of decorated filaments. 105:325.
—, **and Bretscher, A.** Mapping of the microvillar 110K–calmodulin complex: calmodulin-associated or -free fragments of the 110-kD polypeptide bind F-actin and retain ATPase activity. 106:367.
—, **and Bretscher, A.** Reassociation of microvillar core proteins: making a microvillar core in vitro. 108:495.
—, **and Tilney, L. G.** Phalloidin enhances actin assembly by preventing monomer dissociation. 99:529.
—, **and Tilney, L. G.** Under physiological conditions actin disassembles slowly from the nonpreferred end of an actin filament. 97:1629.
— *See* Bryan and Coluccio.
— *See* Bullitt, DeRosier, Coluccio, and Tilney.
— *See* Tilney, Bonder, Coluccio, and Mooseker.
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Comoglio, P. M. *See* Albini, Allavena, Melchiori, Giancotti, Richter, Comoglio, Parodi, Martin, and Tarone.
— *See* Giancotti, Comoglio, and Tarone.
— *See* Tarone, Galetto, Prat, and Comoglio.
Compans, R. W. *See* Alonso and Compans.
— *See* Alonso-Caplen and Compans.
Condeelis, J., and Vahey, M. A calcium- and pH-regulated protein from *Dictyostelium discoideum* that cross-links actin filaments. 94:466.
— *See* Bennett and Condeelis.
— *See* Detmers, Goodenough, and Condeelis.
— *See* Hall, Warren, Dharmawardhane, and Condeelis.
— *See* Wessels, Schroeder, Voss, Hall, Condeelis, and Soll.
Condeelis, J. S. *See* Carboni and Condeelis.
— *See* Salisbury, Condeelis, and Satir.
Conforti, G. *See* Dejana, Colella, Conforti, Abbadini, Gaboli, and Marchisio.
Connell, L. *See* Burridge and Connell.
Connolly, J. A. Role of cytoskeleton in the formation, stabilization, and removal of acetylcholine receptor clusters in cultured muscle cells. 99:148.
— *See* Kelvin, Simard, Sue-A-Quan, and Connolly.
— *See* Kelvin, Simard, Tai, Yamaguchi, and Connolly.
Connolly, J. L., Green, S. A., and Greene, L. A. Comparison of rapid changes in surface morphology and coated pit formation of PC12 cells in response to nerve growth factor, epidermal growth factor, and dibutyryl cyclic AMP. 98:457.
—, **Green, S. A., and Greene, L. A.** Pit formation and rapid changes in surface morphology of sympathetic neurons in response to nerve growth factor. 90:176.
— *See* Green, Rydel, Connolly, and Greene.
— *See* Greene, Drexler, Connolly, Rukenstein, and Green.
— *See* Seeley, Rukenstein, Connolly, and Greene.
Connolly, T., Collins, P., and Gilmore, R. Access of proteinase K to partially translocated nascent polypeptides in intact and detergent-solubilized membranes. 108:299.
—, **and Gilmore, R.** Formation of a functional ribosome–membrane junction during translocation requires the participation of a GTP-binding protein. 103:2253.
— *See* Wilson, Connolly, Morrison, and Gilmore.
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— *See* Hoppe, Connolly, and Hubbard.
Connor, E. A., and McMahan, U. J. Cell accumulation in the junctional region of denervated muscle. 104:109.
Connor, J., and Huang, L. Efficient cytoplasmic delivery of a fluorescent dye by pH-sensitive immunoliposomes. 101:582.
Conrad, G. W., Dessau, W., and von der Mark, K. Synthesis of type III collagen by fibroblasts from the embryonic chick cornea. 84:501.
—, **and Rink, T. J.** Platelet activating factor raises intracellular calcium ion concentration in macrophages. 103:439.
— *See* Devore, Conrad, and Rappaport.
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Conti, M. A. *See* Lamb, Fernandez, Conti, Adelstein, Glass, Welch, and Feramisco.
Conyers, G. P. *See* Milks, Conyers, and Cramer.
Conzelman, K. A., and Mooseker, M. S. The 100-kD protein–calmodulin complex of the intestinal microvillus is an actin-activated MgATPase. 105:313.
— *See* Carboni, Conzelman, Adams, Kaiser, Pollard, and Mooseker.
— *See* Keller, Conzelman, Chasan, and Mooseker.
— *See* Mooseker, Conzelman, Coleman, Heuser, and Sheetz.
Cook, J., Hou, E., Hou, Y., Cairo, A., and Doyle, D. Establishment of plasma membrane domains in hepatocytes. I. Characterization and localization to the bile canaliculus of three antigens externally oriented in the plasma membrane. 97:1823.
Cook, K. S., Hunt, C. R., and Spiegelman, B. M. Developmentally regulated mRNAs in 3T3-adipocytes: analysis of transcriptional control. 100:514.
Cook, R. G. *See* Chicoine, Richman, Cook, Gorovsky, and Allis.
— *See* Lin, Leone, Cook, and Allis.
— *See* Richman, Chicoine, Collini, Cook, and Allis.

— *See* Roth, Schulman, Richman, Cook, and Allis.
— *See* Schulman, Cook, Richman, and Allis.
Cook, S. C. *See* Majack, Cook, and Bornstein.
Cooke, C. *See* Earnshaw, Halligan, Cooke, and Rothfield.
Cooke, C. A., Heck, M. M. S., and Earnshaw, W. C. The inner centromere protein (INCENP) antigens: movement from inner centromere to midbody during mitosis. 105:2053.
— *See* Earnshaw, Halligan, Cooke, Heck, and Liu.
— *See* Earnshaw, Sullivan, Machlin, Cooke, Kaiser, Pollard, Rothfield, and Cleveland.
Cooke, P. H. *See* Kargacin, Cooke, Abramson, and Fay.
Cooper, D. L. *See* Salpeter, Cooper, and Levitt-Gilmour.
Cooper, D. N. *See* Barondes, Cooper, and Haywood-Reid.
Cooper, D. N. W. *See* Barondes, Haywood-Reid, and Cooper.
Cooper, J. A. Effects of cytochalasin and phalloidin on actin. 105:1473.
—, **Blum, J. D., and Pollard, T. D.** *Acanthamoeba castellanii* capping protein: properties, mechanism of action, immunologic cross-reactivity, and localization. 99:217.
—, **Bryan, J., Schwab, B., III, Frieden, C., Loftus, D. J., and Elson, E. L.** Microinjection of gelsolin into living cells. 104:491.
—, **and Hunter, T.** Discrete primary locations of a tyrosine protein kinase and of three proteins that contain phosphotyrosine in virally transformed chick fibroblasts. 94:287.
—, **and Hunter, T.** Similarities and differences between the effects of epidermal growth factor and Rous sarcoma virus. 91:878.
—, **Loftus, D. J., Frieden, C., Bryan, J., and Elson, E. L.** Localization and mobility of gelsolin in cells. 106:1229.
— *See* Gould, Cooper, Bretscher, and Hunter.
— *See* Gould, Cooper, and Hunter.
— *See* Kazlauskas and Cooper.
— *See* Nigg, Cooper, and Hunter.
— *See* Tseng, Runge, Cooper, Williams, and Pollard.
Cooper, K. M. *See* Haigler, White, Brown, and Cooper.
Cooper, M. S., and Schliwa, M. Motility of cultured fish epidermal cells in the presence and absence of direct current electric fields. 102:1384.
Cooper, N. G. F., McLaughlin, B. J., Tallant, E. A., and Cheung, W. Y. Calmodulin-dependent protein phosphatase: immunocytochemical localization in chick retina. 101:1212.
Cooper, P. J. *See* Danpure, Cooper, Wise, and Jennings.
Cooper, T. A. *See* Mar, Antin, Cooper, and Ordahl.
Cootauco, C. *See* Trapp, Andrews, Cootauco, and Quarles.
Copeland, C. S., Doms, R. W., Bolzau, E. M., Webster, R. G., and Helenius, A. Assembly of influenza hemagglutinin trimers and its role in intracellular transport. 103:1179.
— *See* Hurtley, Bole, Hoover-Litty, Helenius, and Copeland.
Coppard, N. *See* Bravo, Fey, Larsen, Coppard, and Celis.
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Corbascio, G. C. *See* Dejana, Colella, Languino, Balconi, Corbascio, and Marchisio.
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Coremans, J. M. C. C. *See* Ince, Coremans, Ypey, Leijh, Verveen, and van Furth.
Corfman, D. H. *See* Klempner, Mikkelsen, Corfman, and Andre-Schwartz.
Corless, C. L., Matzuk, M. M., Ramabhadran, T. V., Krichevsky, A., and Boime, I. Gonadotropin beta subunits determine the rate of assembly and the oligosaccharide processing of hormone dimer in transfected cells. 104:1173.
Corless, J. M. *See* Zampighi, Corless, and Robertson.
Cornbrooks, C. J. *See* Carey, Eldridge, Cornbrooks, Timpl, and Bunge.
— *See* Mehta, Orphe, Todd, Cornbrooks, and Carey.
Cornelissen, F. *See* Geuens, Gundersen, Nuydens, Cornelissen, Bulinski, and De Brabander.
Cornell, R. B., and Horwitz, A. F. Apparent coordination of the biosynthesis of lipids in cultured cells: its relationship to the regulation of the membrane sterol:phospholipid ratio and cell cycling. 86:810.
—, **Nissley, S. M., and Horwitz, A. F.** Cholesterol availability modulates myoblast fusion. 86:820.
Corte, G. *See* Meldolesi, Corte, Pietrini, and Borgese.
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Corvol, P. *See* Bouhnik, Cassio, Coezy, Corvol, and Weiss.
Cosson, P., de Curtis, I., Pouysségur, J., Griffiths, G., and Davoust, J. Low cytoplasmic pH inhibits endocytosis and transport from the *trans*-Golgi network to the cell surface. 108:377.
Cossu, G. *See* Vivarelli, Brown, Whalen, and Cossu.
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Costello, B., Chadwick, C., Saito, A., Chu, A., Maurer, A., and Fleischer, S. Characterization of the junctional face membrane from terminal cisternae of sarcoplasmic reticulum. 103:741.
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— *See* Tilney, Tilney, Stephens, Merte, Drenckhahn, Cotanche, and Bretscher.
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Cotran, R. S. *See* Schreiner and Cotran.
Couchie, D., Fages, C., Bridoux, A. M., Rolland, B., Tardy, M., and Nunez, J. Microtubule-associated proteins and in vitro astrocyte differentiation. 101:2095.
Couchman, J. R. Heterogeneous distribution of a basement membrane heparan sulfate proteoglycan in rat tissues. 105:1901.
—, **Höök, M., Ress, D. A., and Timpl, R.** Adhesion, growth, and matrix production by fibroblasts on laminin substrates. 96:177.
—, **Rees, D. A., Green, M. R., and Smith, C. G.** Fibronectin has a dual role in motility and anchorage of primary chick fibroblasts and can promote entry into the division cycle. 93:402.
— *See* Abrahamson, Irwin, St. John, Perry, Accavitti, Heck, and Couchman.
— *See* Hogan, Taylor, Kurkinen, and Couchman.
— *See* McCarthy, Accavitti, and Couchman.
Coudrier, E. *See* Dudouet, Robine, Huet, Sahuquillo-Merino, Blair, Coudrier, and Louvard.
— *See* Garcia, Coudrier, Carboni, Anderson, Vandekerkhove, Mooseker, Louvard, and Arpin.
— *See* Huet, Sahuquillo-Merino, Coudrier, and Louvard.
— *See* Reggio, Bainton, Harms, Coudrier, and Louvard.
Coue, M. *See* Vigers, Coue, and McIntosh.
Coulombe, P. A., Kopan, R., and Fuchs, E. Expression of keratin K14 in the epidermis and hair follicle: insights into complex programs of differentiation. 109:2295.
Courtois, Y. *See* Schreiber, Kenney, Kowalski, Thomas, Gimenez-Gallego, Rios-Candelore, Di Salvo, Barritault, Courty, Courtois, Moenner, Loret, Burgess, Mehlman, Friesel, Johnson, and Maciag.
Courtoy, P. J., Kanwar, Y. S., Hynes, R. O., and Farquhar, M. G. Fibronectin localization in the rat glomerulus. 87:691.
—, **Quintart, J., and Baudhuin, P.** Shift of equilibrium density induced by 3,3′-diaminobenzidine cytochemistry: a new procedure for the analysis and purification of peroxidase-containing organelles. 98:870.
— *See* Baron, Neff, Brown, Courtoy, Louvard, and Farquhar.
— *See* Baron, Neff, Louvard, and Courtoy.
— *See* Draye, Courtoy, Quintart, and Baudhuin.
— *See* Quintart, Courtoy, and Baudhuin.
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Courvalin, J. C. *See* Cartaud, Courvalin, Ludosky, and Cartaud.
Cousens, L. D. *See* Feige, Bradley, Fryburg, Farris, Cousens, Barr, and Baird.
Covault, J., Cheney, J. M., and Sanes, J. R. Neurite outgrowth on cryostat sections of innervated and denervated skeletal muscle. 105:2479.
—, **Merlie, J. P., Goridis, C., and Sanes, J. R.** Molecular forms of N-CAM and its RNA in developing and denervated skeletal muscle. 102:731.
—, **and Sanes, J. R.** Distribution of N-CAM in synaptic and extrasynaptic portions of developing and adult skeletal muscle. 102:716.
— *See* Sanes, Schachner, and Covault.
Cowan, A. E., Myles, D. G., and Koppel, D. E. Lateral diffusion of the PH-20 protein on guinea pig sperm: evidence that barriers to diffusion maintain plasma membrane domains in mammalian sperm. 104:917.
—, **Primakoff, P., and Myles, D. G.** Sperm exocytosis increases the amount of PH-20 antigen on the surface of guinea pig sperm. 103:1289.
Cowan, N. J. *See* Aletta, Lewis, Cowan, and Greene.
— *See* Gu, Lewis, and Cowan.
— *See* Lewis and Cowan.
— *See* Lewis, Lee, and Cowan.
— *See* Lewis, Sherline, and Cowan.
— *See* Lewis, Villasante, Sherline, and Cowan.
— *See* Noble, Lewis, and Cowan.
— *See* Wang, Villasante, Lewis, and Cowan.
Cowin, P., Kapprell, H.-P., and Franke, W. W. The complement of desmosomal plaque proteins in different cell types. 101:1442.
Cowling, G. J. *See* Allan, Cowling, Harborne, Cattini, Craigie, and Gould.
Cox, A. C., Carroll, R. C., White, J. G., and Rao, G. H. R. Recycling of platelet phosphorylation and cytoskeletal assembly. 98:8.
Cox, G. F. *See* Maher, Cox, and Singer.
Cox, G. N., Kusch, M., and Edgar, R. S. Cuticle of *Caenorhabditis ele-*

gans: Its isolation and partial characterization. 90:7.
Cox, J. V., Moon, R. T., and Lazarides, E. Anion transporter: highly cell-type-specific expression of distinct polypeptide and transcripts in erythroid and nonerythroid cells. 100:1548.
—, Stack, J. H., and Lazarides, E. Erythroid anion transporter assembly is mediated by a developmentally regulated recruitment onto a preassembled membrane cytoskeleton. 105:1405.
Cox, S. M. *See* Brinkley, Cox, Pepper, Wible, Brenner, and Pardue.
Crabb, J. H., and Jackson, R. C. In vitro reconstitution of exocytosis from plasma membrane and isolated secretory vesicles. 101:2263.
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Craig, R., Padrón, R., and Kendrick-Jones, J. Structural changes accompanying phosphorylation of tarantula muscle myosin filaments. 105:1319.
— *See* Frado and Craig.
— *See* Vibert and Craig.
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— *See* Casella, Craig, Maack, and Brown.
— *See* D'Angelo Siliciano and Craig.
— *See* Nunnally, D'Angelo, and Craig.
— *See* Pardo, Siliciano, and Craig.
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— *See* Burgess, Craik, Matsuuchi, and Kelly.
— *See* Powell, Orci, Craik, and Moore.
Cramer, E. B., Milks, L. C., Brontoli, M. J., Ojakian, G. K., Wright, S. D., and Showell, H. J. Effect of human serum and some of its components on neutrophil adherence and migration across an epithelium. 102:1868.
— *See* Furie, Cramer, Naprstek, and Silverstein.
— *See* Milks, Brontoli, and Cramer.
— *See* Milks, Conyers, and Cramer.
Crane, R. *See* Papasozomenos, Yoon, Crane, Autilio-Gambetti, and Gambetti.
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Crawford, G. *See* Flanagan, Yost, and Crawford.
Credo, R. B. *See* Gudewicz, Molnar, Lai, Beezhold, Siefring, Credo, and Lorand.
Cremins, J., Wagner, J. A., and Halegoua, S. Nerve growth factor action is mediated by cyclic AMP- and CA^{2+}/phospholipid-dependent protein kinases. 103:887.
Crenshaw, E. B. *See* Van De Water, Schroeder, Crenshaw, and Hynes.
Creutz, C. E. *cis*-Unsaturated fatty acids induce the fusion of chromaffin granules aggregated by synexin. 91:247.
Criscuolo, B. A., and Krag, S. S. Selection of tunicamycin-resistant Chinese hamster ovary cells with increased *N*-acetylglucosaminyl-transferase activity. 94:586.
Crisona, N. J., and Strohman, R. C. Inhibition of contraction of cultured muscle fibers results in increased turnover of myofibrillar proteins but not of intermediate-filament proteins. 96:684.
— *See* Herman, Crisona, and Pollard.
Crispe, I. N. *See* Cardarelli, Crispe, and Pierschbacher.
Crissman, H. A., Darzynkiewicz, Z., Tobey, R. A., and Steinkamp, J. A. Normal and perturbed Chinese hamster ovary cells: correlation of DNA, RNA, and protein content by flow cytometry. 101:141.
Critchley, D. R., Nelson, P. G., Habig, W. H., and Fishman, P. H. Fate of tetanus toxin bound to the surface of primary neurons in culture: evidence for rapid internalization. 100:1499.
— *See* Griffiths, Perkins, Streuli, and Critchley.
— *See* Jones, Jackson, Price, Patel, Ohanion, Lear, and Critchley.
— *See* Kellie, Patel, Pierce, and Critchley.
Crocker, P. R. *See* Morris, Crocker, and Gordon.
Croen, K. *See* Glickman, Croen, Kelly, and Al-Awqati.
Crooks, S. *See* Knox, Crooks, and Rimmer.
Cross, A. R. *See* Roberts, Cross, Jones, and Segal.
Cross, G. A. M. *See* Duszenko, Ivanov, Ferguson, Plesken, and Cross.
— *See* Haldar, de Amorim, and Cross.
Cross, N. V. *See* Cole, Loewy, Cross, Akeson, and Glaser.
Cross, R. A. *See* Bennett, Cross, Kendrick-Jones, and Weeds.
— *See* Citi, Cross, Bagshaw, and Kendrick-Jones.
Crossin, K. L., Edelman, G. M., and Cunningham, B. A. Mapping of three carbohydrate attachment sites in embryonic and adult forms of the neural cell adhesion molecule. 99:1848.
—, Hoffman, S., Grumet, M., Thiery, J.-P., and Edelman, G. M. Site-restricted expression of cytotactin during development of the chicken embryo. 102:1917.
— *See* Chuong, Crossin, and Edelman.
— *See* Daniloff, Crossin, Pinçon-Raymond, Murawsky, Rieger, and Edelman.
— *See* Hoffman, Crossin, and Edelman.
— *See* Levi, Crossin, and Edelman.
— *See* Murray, Owens, Prediger, Crossin, Cunningham, and Edelman.
— *See* Rieger, Daniloff, Pinçon-Raymond, Crossin, Grumet, and Edelman.
Crossland, J. *See* Clark, Crossland, Kaplan, and Martinez-Hernandez.
Crouch, E. C. *See* Blair, Kahn, Crouch, Jeffrey, and Teitelbaum.
Crouse, G. F. *See* Leys, Crouse, and Kellems.
Crow, M. T., Olson, P. S., and Stockdale, F. E. Myosin light-chain expression during avian muscle development. 96:736.
— *See* Miller, Crow, and Stockdale.
Crowley, E. *See* Werb, Tremble, Behrendtsen, Crowley, and Damsky.
Crowther, R. A., and Pearse, B. M. Assembly and packing of clathrin into coats. 91:790.
— *See* Sorger, Crowther, Finch, and Pearse.
— *See* Wischik, Crowther, Stewart, and Roth.
Croze, E., Ivanov, I. E., Kreibich, G., Adesnik, M., Sabatini, D. D., and Rosenfeld, M. G. Endolyn-78, a membrane glycoprotein present in morphologically diverse components of the endosomal and lysosomal compartments: implications for lysosome biogenesis. 108:1597.
Cruz-Orive, L. M. *See* Schwerzmann, Cruz-Orive, Eggmann, Sänger, and Weibel.
Crystal, R. G. *See* Bitterman, Rennard, Adelberg, and Crystal.
Cuatrecasas, P. *See* Besterman and Cuatrecasas.
— *See* Burgess, Sahyoun, Blanchard, LeVine, Chang, and Cuatrecasas.
Cubellis, M. V. *See* Picone, Kajtaniak, Nielsen, Behrendt, Mistronicola, Cubellis, Stoppelli, Pedersen, Danø, and Blasi.
Cui, T.-Y. *See* Fisher, Cui, Zhang, Hartman, Grahl, Guo-Yang, Tarpey, and Damsky.
Cullen, B. *See* Parry, Cullen, Kaetzel, Kramer, and Moss.
Culotti, J. *See* Aamodt, Holmgren, and Culotti.
Culotti, J. G. *See* Aamodt and Culotti.
Culp, L. A. *See* Chernoff, Maresh, and Culp.
— *See* Laterra, Silbert, and Culp.
— *See* Lewandowska, Choi, Rosenberg, Zardi, and Culp.
— *See* Mugnai, Lewandowska, Carnemolla, Zardi, and Culp.
Culpepper, J. A., and Liu, A. Y.-C. Induction of tryosine aminotransferase in H-35 hepatoma cells by cAMP captured in phospholipid vesicles. 88:89.
Cumming, R., Burgoyne, R. D., and Lytton, N. A. Immunocytochemical demonstration of α-tubulin modification during axonal maturation in the cerebellar cortex. 98:347.
Cummings, A., and Sommerville, J. Protein kinase activity associated with stored messenger ribonucleoprotein particles of *Xenopus* oocytes. 107:45.
Cummings, R. D. *See* Pathak, Merkle, Cummings, Goldstein, Brown, and Anderson.
Cunha, G. R., Fujii, H., Neubauer, B. L., Shannon, J. M., Sawyer, L., and Reese, B. A. Epithelial-mesenchymal interactions in prostatic development. I. Morphological observations of prostatic induction by urogenital sinus mesenchyme in epithelium of the adult rodent urinary bladder. 96:1662.
— *See* Neubauer, Chung, McCormick, Taguchi, Thompson, and Cunha.
Cunningham, B. A. *See* Crossin, Edelman, and Cunningham.
— *See* Murray, Hemperly, Prediger, Edelman, and Cunningham.
— *See* Murray, Owens, Prediger, Crossin, Cunningham, and Edelman.
Cuono, C. *See* Halaban, Langdon, Birchall, Cuono, Baird, Scott, Moellmann, and McGuire.
Curry, A. M. *See* Williams, Velleca, Curry, and Rosenbaum.
Curtis, A. S. G., Forrester, J. V., McInnes, C., and Lawrie, F. Adhesion of cells to polystyrene surfaces. 97:1500.
Curtis, D. H. *See* Entwistle, Curtis, and Zalin.
Cutler, D. F., and Garoff, H. Mutants of the membrane-binding region of Semliki Forest virus E2 protein. I. Cell surface transport and fusogenic activity. 102:889.
—, Melancon, P., and Garoff, H. Mutants of the membrane-binding region of Semliki Forest virus E2 protein. II. Topology and membrane binding. 102:902.
Cyert, M. S. *See* Sorensen, Cyert, and Pedersen.
Czaja, M. J., Weiner, F. R., Flanders, K. C., Giambrone, M.-A., Wind, R., Biempica, L., and Zern, M. A. In vitro and in vivo association of transforming growth factor-β1 with hepatic fibrosis. 108:2477.
Czernik, A. J. *See* Bähler, Benfenati, Valtorta, Czernik, and Greengard.
Czosnek, H., Soifer, D., and Wisniewski, H. Studies on the biosynthesis of neurofilament proteins. 85:726.

D

Dabauvalle, M.-C., and Franke, W. W. Determination of the intracellular state of soluble macromolecules by gel filtration in vivo in the cytoplasm of amphibian oocytes. 102:2006.
— *See* Kleinschmidt, Scheer, Dabauvalle, Bustin, and Franke.
Dabiké, M. *See* Koenig, Dabiké, and Bronfman.
Dabiri, G. A. *See* Southwick, Dabiri, Paschetto, and Zigmond.
Dacheux, J.-L. *See* Pariset, Feinberg, Dacheux, Øyen, Jahnsen, and Weinman.
Dagenais, A. *See* Lailberté, Dagenais, Filion, Bibor-Hardy, Simard, and Royal.
Dahl, D. *See* Liesi, Dahl, and Vaheri.
Dahl, S. C., and Grabel, L. B. Integrin phosphorylation is modulated during the differentiation of F-9 teratocarcinoma stem cells. 108:183.
Dahlin, J. *See* Nybroe, Albrechtsen, Dahlin, Linneman, Lyles, Møller, and Bock.
Dahms, A. S. *See* Damiani, Margreth, Furlan, Dahms, Arnn, and Sabbadini.
Dai, H. *See* Mueller, Kelly, Dai, Dai, and Chen.
Dai, M. *See* Mueller, Kelly, Dai, Dai, and Chen.
Dailey, M. E. *See* Bridgman and Dailey.
Daiss, J. L. *See* Kelly, Passaniti, Woods, Daiss, and Roth.
Dale, B. A., Holbrook, K. A., Kimball, J. R., Hoff, M., and Sun, T.-T. Expressions of epidermal keratins and filaggrin during human fetal skin development. 101:1257.
— *See* Holbrook, Dale, and Brown.
— *See* Resing, Walsh, and Dale.
Daleke, D. L., and Huestis, W. H. Erythrocyte morphology reflects the transbilayer distribution of incorporated phospholipids. 108:1375.
Daley, R. A. *See* Eckert, Daley, and Parysek.
Dalla Libera, L. *See* Carraro, Morale, Mussini, Lucke, Cantini, Betto, Catani, Dalla Libera, Betto, and Noventa.
Daly, P. *See* Jorgensen, Shen, Daly, and MacLennan.
Damiani, E., Margreth, A., Furlan, A., Dahms, A. S., Arnn, J., and Sabbadini, R. A. Common structural domains in the sarcoplasmic reticulum Ca-ATPase and the transverse tubule Mg-ATPase. 104:461.
Damjanov, I. *See* Wan, Wu, Chung, and Damjanov.
D'Amore, P. *See* Kelley, D'Amore, Hechtman, and Shepro.
D'Amore, P. A., and Klagsbrun, M. Endothelial cell mitogens derived from retina and hypothalamus: biochemical and biological similarities. 99:1545.
— *See* Braunhut, Gudas, Kurokawa, Sasse, and D'Amore.
— *See* Glaser, D'Amore, Michels, Patz, and Fenselau.
— *See* Herman and D'Amore.
— *See* McNeil, Muthukrishnan, Warder, and D'Amore.
— *See* Orlidge and D'Amore.
— *See* Wagner and D'Amore.
Damsky, C. *See* Neff, Lowrey, Decker, Tovar, Damsky, Buck, and Horwitz.
Damsky, C. H., Knudsen, K. A., Bradley, D., Cuck, C. A., and Horwitz, A. F. Distribution of the cell substratum attachment (CSAT) antigen on myogenic and fibroblastic cells in culture. 100:1528.
—, **Knudsen, K. A., Dorio, R. J., and Buck, C. A.** Manipulation of cell-cell and cell-substratum interactions in mouse mammary tumor epithelial cells using broad spectrum antisera. 89:173.
— *See* Fisher, Cui, Zhang, Hartman, Grahl, Guo-Yang, Tarpey, and Damsky.
— *See* Sutherland, Calarco, and Damsky.
— *See* Tomaselli, Damsky, and Reichardt.
— *See* Werb, Tremble, Behrendtsen, Crowley, and Damsky.
Daneels, G. *See* Langanger, De May, Moeremans, Daneels, De Brabander, and Small.
— *See* Langanger, Moeremans, Daneels, Sobieszek, De Brabander, and De Mey.
Daneholt, B. *See* Andersson, Björkroth, and Daneholt.
Dang, C. V., Yang, D. C. H., and Pollard, T. D. Association of methionyl-tRNA synthetase with detergent-insoluble components of the rough endoplasmic reticulum. 96:1138.
D'Angelo, J. M. *See* Nunnally, D'Angelo, and Craig.
D'Angelo Siliciano, J., and Craig, S. W. Properties of smooth muscle meta-vinculin. 104:473.
—, **and Goodenough, D. A.** Localization of the tight junction protein, ZO-1, is modulated by extracellular calcium and cell–cell contact in Madin–Darby canine kidney epithelial cells. 107:2389.
Daniel, J. C., Pauli, B. U., and Kuettner, K. E. Synthesis of cartilage matrix by mammalian chrondrocytes in vitro. III. Effects of ascorbate. 99:1960.
— *See* Kuettner, Memoli, Pauli, Wrobel, Thonar, and Daniel.
Daniels, L. S. *See* Preston, Regula, Sager, Pearson, Daniels, Brown, and Berlin.
Daniels, M. P. *See* Prives, Fulton, Penman, Daniels, and Christian.
Daniloff, J. K., Crossin, K. L., Pinçon-Raymond, M., Murawsky, M., Rieger, F., and Edelman, G. M. Expression of cytotactin in the normal and regenerating neuromuscular system. 108:625.
—, **Levi, G., Grumet, M., Rieger, F., and Edelman, G. M.** Altered expression of neuronal cell adhesion molecules induced by nerve injury and repair. 103:929.
— *See* Rieger, Daniloff, Pinçon-Raymond, Crossin, Grumet, and Edelman.
Danilov, Y. N., and Juliano, R. L. Phorbol ester modulation of integrin-mediated cell adhesion: a postreceptor event. 108:1925.
— *See* Schreiner, Bauer, Danilov, Hussein, Sczekan, and Juliano.
D'Anna, F. *See* De Luca, D'Anna, Bondanza, Franzi, and Cancedda.
Dannies, P. S. *See* Kiino, Burger, and Dannies.
Danø, K. *See* Blasi, Vassalli, and Danø.
— *See* Kristensen, Nielsen, Grøndahl-Hansen, Andresen, Larson, and Danø.
— *See* Larsson, Skriver, Nielsen, Hansen, Kristensen, and Danø.
— *See* Picone, Kajtaniak, Nielsen, Behrendt, Mistronicola, Cubellis, Stoppelli, Pedersen, Danø, and Blasi.
— *See* Pöllänen, Hedman, Nielsen, Danø, and Vaheri.
— *See* Pöllänen, Saksela, Salonen, Andreasen, Nielsen, Danø, and Vaheri.
— *See* Skriver, Larsson, Kielberg, Nielsen, Andresen, Kristensen, and Danø.
— *See* Stephens, Pöllänen, Tapiovaara, Leung, Sim, Salonen, Rønne, Behrendt, Danø, and Vaheri.
Danpure, C. J., Cooper, P. J., Wise, P. J., and Jennings, P. R. An enzyme trafficking defect in two patients with primary hyperoxaluria type 1: peroxisomal alanine/glyoxylate aminotransferase rerouted to mitochondria. 108:1345.
Danto, S. I., and Fischman, D. A. Immunochemical analysis of intermediate filaments in embryonic heart cells with monoclonal antibodies to desmin. 98:2179.
Darbre, P., and King, R. J. B. Progression to steroid autonomy in S115 mouse mammary tumor cells: role of DNA methylation. 99:1410.
Darby, M. K. *See* Featherstone, Darby, and Gerace.
D'Ari, L. *See* Wright, Basson, D'Ari, and Rine.
Darlington, G. J. Wilson, D. R., and Lachman, L. B. Monocyte-conditioned medium, interleukin-1, and tumor necrosis factor stimulate the acute phase response in human hepatoma cells in vitro. 103:787.
Darnell, J. E., Jr. *See* Bennett, Paulson, Miller, and Darnell.
— *See* Isom, Georgoff, Salditt-Georgieff, and Darnell.
— *See* Krauter, Leinwand, D'Eustachio, Ruddle, and Darnell.
— *See* Salditt-Georgieff, Harpold, Sawicki, Nevins, and Darnell.
Darr, S. C., Somerville, S. C., and Arntzen, C. J. Monoclonal antibodies to the light-harvesting chlorophyll *a/b* protein complex of photosystem II. 103:733.
Darribère, T. *See* Boucaut, Darribère, Poole, Aoyama, Yamada, and Thiery.
Darveau, A. *See* Bonneau, Darveau, and Sonenberg.
Darzynkiewicz, Z. *See* Crissman, Darzynkiewicz, Tobey, and Steinkamp.
Das, M. *See* Murthy, Basu, Sen-Majumdar, and Das.
Da Silva, P. P., Torrisi, M. R., and Kachar, B. Freeze-fracture cytochemistry: localization of wheat-germ agglutinin and concanavalin A binding sites of freeze-fractured pancreatic cells. 91:361.
Datta, S. *See* Gomer, Datta, and Firtel.
Daukas, G., Lauffenburger, D. A., and Zigmond, S. Reversible pinocytosis in polymorphonuclear leukocytes. 96:1642.
—, **and Zigmond, S. H.** Inhibition of receptor-mediated by not fluid-phase endocytosis in polymorphonuclear leukocytes. 101:1673.
— *See* Sullivan, Daukas, and Zigmond.
Daum, G. *See* Rothblatt, Deshaies, Sander, Daum, and Schekman.
d'Autremont, S. W. *See* Brenneman, Neale, Foster, d'Autremont, and Westbrook.
Dautry-Varsat, A. *See* Moya, Dautry-Varsat, Goud, Louvard, and Boquet.
David, G., and Bernfield, M. Type 1 collagen reduces the degradation of basal lamina proteoglycan by mammary epithelial cells. 91:281.
—, **Lories, V., Heremans, A., Van Der Schueren, B., Cassiman, J.-J., and Van Den Berghe, H.** Membrane-associated chondroitin sulfate proteoglycans of human lung fibroblasts. 108:1165.
— *See* Heremans, Van Der Schueren, De Cock, Paulsson, Cassiman, Van Den Berghe, and David.
David, J. R. *See* Caulfield, Korman, Butterworth, Hogan, and David.
— *See* Samuelson, Caulfield, and David.
Davidson, H. W., and Watts, C. Epitope-directed processing of specific antigen by B lymphocytes. 109:85.
Davidson, J. M., Klagbrun, M., Hill, K. E., Buckley, A., Sullivan, R., Brewer, P. S., and Woodward, S. C. Accelerated wound repair, cell proliferation, and collagen accumulation are produced by a cartilage-derived growth factor. 100:1219.
Davidson, R. L. *See* Roos, Robinson, and Davidson.
Davie, J. R. *See* Rattner, Saunders, Davie, and Hamkalo.
Davies, J., Warwick, J., Totty, N., Philp, R., Helfrich, M., and Hor-

ton, M. The osteoclast functional antigen, implicated in the regulation of bone resorption, is biochemically related to the vitronectin receptor. 109:1817.
Davies, P. F., Truskey, G. A., Warren, H. B., O'Connor, S. E., and Eisenhaure, B. H. Metabolic cooperation between vascular endothelial cells and smooth muscle cells in co-culture: changes in low density lipoprotein metabolism. 101:871.
Davies, P. J. A. *See* Murtaugh, Steiner, and Davies.
Davis, B. H. *See* Pfeiffer, Seagrave, Davis, Deanin, and Oliver.
Davis, G. E. *See* Engvall, Davis, Dickerson, Ruoslahti, Varon, and Manthorpe.
— *See* Manthorpe, Engvall, Ruoslahti, Longo, Davis, and Varon.
Davis, G. L., and Hunter, E. A charged amino acid substitution within the transmembrane anchor of the Rous sarcoma virus envelope glycoprotein affects surface expression but not intracellular transport. 105:1191.
Davis, J. A. *See* Clapper, Davis, Lamothe, Patton, and Epel.
Davis, J. B. *See* Ridley, Davis, Stroobant, and Land.
Davis, J. M. *See* Moutsatsos, Davis, and Wang.
Davis, J. Q. *See* Fowler, Davis, and Bennett.
Davis, M. H. *See* Gelman, Davis, Morris, and Gruenstein.
Davis, M. M. *See* Garchon and Davis.
Davis, N. G. *See* Pederson and Davis.
Davis, R., and Koelle, G. B. Electron microscope localization of acetylcholinesterase and butyrylcholinesterase in the superior cervical ganglion of the cat. II. Preganglionically denervated ganglion. 88:581.
Davis, R. L., and Kiger, J. A. *dunce* mutants of *Drosophila melanogaster*: Mutants defective in the cyclic AMP phosphodiesterase enzyme system. 90:101.
Davison, E. A., *See* Rieder, Davison, Jensen, Cassimeris, and Salmon.
Davison, P. F., and Jones, R. N. Filament proteins in central, cranial, and peripheral mammalian nerves. 88:67.
Davison, P. M, Bensch, K., and Karasek, M. A. Growth and morphology of rabbit marginal vessel endothelium in cell culture. 85:187.
— *See* Fielding, Davison, Karasek, and Fielding.
— *See* Kramer, Bensch, Davison, and Karasek.
Davitz, M. A. *See* Lisanti, Caras, Davitz, and Rodriguez-Boulan.
Davoust, J. *See* Cosson, de Curtis, Pouysségur, Griffiths, and Davoust.
Dawid, I. B. *See* Miyatani, Winkles, Sargent, and Dawid.
Dawidowicz, E. A. *See* Hoover, Dawidowicz, Robinson, and Karnovsky.
Dawson, A. *See* Stallcup, Dawson, and Mescher.
Dawson, P. J., Hulme, J. S., and Lloyd, C. W. Monoclonal antibody to intermediate filament antigen cross-reacts with higher plant cells. 100:1793.
Dawson, W. E. *See* Johnson, Dawson, Turner, and Wyche.
Day, D. A., Ryrie, I. J., and Fuad, N. Investigation of the role of the main light-harvesting chlorophyll–protein complex in thylakoid membranes: reconstitution of depleted membranes from intermittent-light-grown plants with the isolated complex. 98:163.
Dayer, J. M., Vassalli, J. D., Bobbitt, J. L., Hull, R. N., Reich, E., and Krane, S. M. Calcitonin stimulates plasminogen activator in porcine renal tubular cells: LLC-PK$_1$. 91:195.
— *See* Mills, Macknight, Jarrell, Dayer, and Ausiello.
Deamer, D. W., and Boatman, D. E. An enzymatically driven membrane reconstitution from solubilized components. 84:461.
de Amorim, A. F. *See* Haldar, de Amorim, and Cross.
Dean, D. C., Newby, R. F., and Bourgeois, S. Regulation of fibronectin biosynthesis by dexamethasone, transforming growth factor-β, and cAMP in human cell lines. 106:2159.
Dean, E. *See* Driscoll, Dean, Reilly, Bergholz, and Chalfie.
Dean, J. *See* East and Dean.
Deanin, G. G. *See* Oliver, Seagrave, Pfeiffer, Feibig, and Deanin.
— *See* Pfeiffer, Seagrave, Davis, Deanin, and Oliver.
Deatherage, J. F., Cheng, N., and Bullard, B. Arrangement of filaments and cross-links in the bee flight muscle Z disk by image analysis of oblique sections. 108:1775.
— *See* Cheng and Deatherage.
De Bernard, B., Bianco, P., Bonucci, E., Costantini, M., Lunazzi, G. C., Martinuzzi, P., Modricky, C., Moro, L., Panfili, E., Pollesello, P., Stagni, N., and Vittur, F. Biochemical and immunohistochemical evidence that in cartilage an alkaline phosphatase is a CA^{2+}-binding glycoprotein. 103:1615.
DeBiasio, R., Bright, G. R., Ernst, L. A., Waggoner, A. S., and Taylor, D. L. Five-parameter fluorescence imaging: wound healing of living Swiss 3T3 cells. 105:1613.
DeBiasio, R. L., Wang, L.-L., Fisher, G. W., and Lansing Taylor, D. The dynamic distribution of fluorescent analogues of actin and myosin in protrusions at the leading edge of migrating Swiss 3T3 fibroblasts. 107:2633.
Debo, G. *See* Noe, Debo, and Spiess.
De Boisfleury, A. C. *See* Malawista and De Boisfleury.
De Brabander, M., Bulinski, J. C., Geuens, G., De Mey, J., and Borisy, G. G. Immunoelectron microscopic localization of the 210,000 microtubule-associated protein in cultured cells of primates. 91:438.
— *See* Geuens, Gundersen, Nuydens, Cornelissen, Bulinski, and De Brabander.
— *See* Geuens, Hill, Levilliers, Adoutte, and De Brabander.
— *See* Langanger, De May, Moeremans, Daneels, De Brabander, and Small.
— *See* Langanger, Moeremans, Daneels, Sobieszek, De Brabander, and De Mey.
De Camilli, P., Cameron, R., and Greengard, P. Synapsin I (protein I), a nerve terminal-specific phosphoprotein. I. Its general distribution in synapses of the central and peripheral nervous system demonstrated by immunofluorescence in frozen and plastic sections. 96:1337.
—, Harris, S. M., Jr., Huttner, W. B., and Greengard, P. Synapsin I (protein I), a nerve terminal-specific phosphoprotein. II. Its specific association with synaptic vesicles demonstrated by immunocytochemistry in agarose-embedded synaptosomes. 96:1355.
—, Moretti, M., Donini, S. D., Walter, U., and Lohmann, S. M. Heterogeneous distribution of the cAMP receptor protein RII in the nervous system: evidence for its intracellular accumulation on microtubules, microtubule-organizing centers, and in the area of the Golgi complex. 103:189.
— *See* Huttner, Schiebler, Greengard, and De Camilli.
— *See* Navone, Di Gioia, Jahn, Browning, Greengard, and De Camilli.
— *See* Navone, Jahn, Di Gioia, Stukenbrok, Greengard, and De Camilli.
— *See* Rosa, Hille, Lee, Zanini, De Camilli, and Huttner.
— *See* Tanaka, De Camilli, and Meldolesi.
Dechesne, C. A., Bouvagnet, P., Walzthöny, D., and Léger, J. L. Visualization of cardiac ventricular myosin heavy chain homodimers and heterodimers by monoclonal antibody epitope mapping. 105:3031.
Decker, C., Greggs, R., Duggan, K., Stubbs, J., and Horwitz, A. Adhesive multiplicity in the interaction of embryonic fibroblasts and myoblasts with extracellular matrices. 99:1398.
— *See* Horwitz, Duggan, Greggs, Decker, and Buck.
— *See* Neff, Lowrey, Decker, Tovar, Damsky, Buck, and Horwitz.
Decker, G. *See* Murphy, Decker, and August.
Decker, G. L. *See* Glasser, Julian, Decker, Tang, and Carson.
— *See* Kinsey, Decker, and Lennarz.
Decker, S. J. *See* Garcia, Stoppelli, Decker, and Rosner.
— *See* Garcia, Stoppelli, Thompson, Decker, and Rosner.
Deckwerth, T. L. *See* Hennessy, Frazier, Kim, Deckwerth, Baumgartel, Rotwein, and Frazier.
De Cock, B. *See* Heremans, Van Der Schueren, De Cock, Paulsson, Cassiman, Van Den Berghe, and David.
de Couet, H. G., Stowe, S., and Blest, A. D. Membrane-associated actin in the rhabdomeral microvilli of crayfish photoreceptors. 98:834.
de Crombrugghe, B. *See* Sporn, Roberts, Wakefield, and de Crombrugghe.
de Curtis, I., Fumagalli, G., and Borgese, N. Purification and characterization of two plasma membrane domains from ejaculated bull spermatozoa. 102:1813.
— *See* Cosson, de Curtis, Pouysségur, Griffiths, and Davoust.
Dedhar, S., Argraves, W. S., Suzuki, S., Ruoslahti, E., and Pierschbacher, M. D. Human osteosarcoma cells resistant to detachment by an arg-gly-asp–containing peptide overproduce the fibronectin receptor. 105:1175.
—, Ruoslahti, E., and Pierschbacher, M. D. A cell surface receptor complex for collagen type I recognizes the arg-gly-asp sequence. 104:585.
Dedman, J. *See* Maihle, Dedman, Means, Chafouleas, and Satir.
Dedman, J. R. *See* Brady, Cabral, and Dedman.
— *See* Lin, Dedman, Brinkley, and Means.
— *See* Pardue, Perry, Brady, and Dedman.
de Duve, C. *See* Schneider, de Duve, and Trouet.
Dee, P. C. *See* Habener, Maunus, Dee, and Potts.
Deerinck, T. J. *See* Abramson, Ellisman, Deerinck, Maulet, Gentry, Doctor, and Taylor.
Deery, W. J., and Brinkley, B. R. Cytoplasmic microtubule assembly-disassembly from endogenous tubulin in a Brij-lysed cell model. 96:1631.
—, Means, A. R., and Brinkley, B. R. Calmodulin-microtubulin association in cultured mammalian cells. 98:904.
Defize, L. H. K., Arndt-Jovin, D. J., Jovin, T. M., Boonstra, J., Meisenhelder, J., Hunter, T., de Hey, H. T., and de Laat, S. W. A431 cell variants lacking the blood group A antigen display increased high affinity epidermal growth factor–receptor number, protein–tyrosine kinase activity, and receptor turnover. 107:939.
—, Boonstra, J., Meisenhelder, J., Kruijer, W., Tertoolen, L. G. J., Tilly, B. C., Hunter, T., van Bergen en Henegouwen, P. M. P.,

Moolenaar, W. H., and de Laat, W. W. Signal transduction by epidermal growth factor occurs through the subclass of high-affinity receptors. 109:2495.
— *See* Wiegant, Blok, Defize, Linnemans, Verkley, and Boonstra.
Deflorin, J. *See* Schlaeppi, Deflorin, and Seebeck.
Dege, J. *See* Charonis, Skubitz, Koliakos, Reger, Dege, Vogel, Wohlhueter, and Furcht.
DeGennaro, L. J. *See* Haas and DeGennaro.
De Gioia, G. *See* Navone, Di Gioia, Jahn, Browning, Greengard, and De Camilli.
De Graan, P. N. E. *See* Van Hooff, Holthuis, Oestreicher, Boonstra, De Graan, and Gispen.
de Groot, P. G., Reinders, J. H., and Sixma, J. J. Perturbation of human endothelial cells by thrombin or PMA changes the reactivity of their extracellular matrix towards platelets. 104:697.
— *See* Brett, Steinberg, de Groot, Nawroth, and Stern.
de Harven, E., Leung, R., and Christensen, H. A novel approach for scanning electron microscopy of colloidal gold–labeled cell surfaces. 99:53.
Dehazya, P. *See* Radke, Carter, Moss, Dehazya, Schliwa, and Martin.
de Hey, H. T. *See* Defize, Arndt-Jovin, Jovin, Boonstra, Meisenhelder, Hunter, de Hey, and de Laat.
de Hostos, E. L., Togasaki, R. K., and Grossman, A. Purification and biosynthesis of a depressible, periplasmic arylsulfatase from *Chlamydomonas reinhardtii*. 106:29.
Deitcher, D. L., Neutra, M. R., and Mostov, K. E. Functional expression of the polymeric immunoglobulin receptor from cloned cDNA in fibroblasts. 102:911.
Dejana, E., Colella, S., Conforti, G., Abbadini, M., Gaboli, M., and Marchisio, P. C. Fibronectin and vitronectin regulate the organization of their respective Arg-Gly-Asp adhesion receptors in cultured human endothelial cells. 107:1215.
—, **Colella, S., Languino, L. R., Balconi, G., Corbascio, G. C., and Marchisio, P. C.** Fibrinogen induces adhesion, spreading, and Microfilament organization of human endothelial cells in vitro. 104:1403.
—, **Lampugnani, M. G., Giorgi, M., Gaboli, M., Federici, A. B., Ruggeri, Z. M., and Marchisio, P. C.** Von Willebrand factor promotes endothelial cell adhesion via an Arg-Gly-Asp–dependent mechanism. 109:367.
de Jong, W. W., Hoekman, W. A., Mulders, J. W. M., and Bloemendal, H. Heat shock response of the rat lens. 102:104.
— *See* Wistow, Lietman, Williams, Stapel, de Jong, Horwitz, and Piatigorsky.
Dekan, G. *See* Horvat, Hovorka, Dekan, and Kerjaschki.
de Laat, S. W., Tertoolen, L. G. J., van der Saag, P. T., and Bluemink, J. G. Quantitative analysis of modulations in numerical and lateral distribution of intramembrane particles during the cell cycle of neuroblastoma cells. 96:1047.
— *See* Boonstra, Moolenaar, Harrison, Mood, van der Saag, and de Laat.
— *See* Defize, Arndt-Jovin, Jovin, Boonstra, Meisenhelder, Hunter, de Hey, and de Laat.
de Laat, W. W. *See* Defize, Boonstra, Meisenhelder, Kruijer, Tertoolen, Tilly, Hunter, van Bergen en Henegouwen, Moolenaar, and de Laat.
Delahunt, N. G. *See* Gorelick, Cohn, Freedman, Delahunt, Gershoni, and Jamieson.
de Lamirande, E., and Gagnon, C. Effects of protease inhibitors and substrates on motility of mammalian spermatozoa. 102:1378.
Delay, R. J., *See* Fifková and Delay.
Del Buono, B. J., Williamson, P. L., and Schlegel, R. A. Relation between the organization of spectrin and of membrane lipids in lymphocytes. 106:697.
Delegeane, A. M. *See* Scharff, Delegeane, and Lee.
De Lemos-Chiarandini, C., Frey, A. B., Sabatini, D. D., and Kreibich, G. Determination of the membrane topology of the phenobarbital-inducible rat liver cytochrome P-450 isozyme PB-4 using site-specific antibodies. 104:209.
Delepelaire, P. *See* Wollman and Delepelaire.
de los Toyos, J. *See* Jalkanen, Bargatze, de los Toyos, and Butcher.
Delouvée, A. *See* Rovasio, Delouvée, Yamada, Timpl, and Thiery.
— *See* Thiery, Delouvée, Grumet, and Edelman.
De Lozanne, A., Berlot, C. H., Leinwand, L. A., and Spudich, J. A. Expression in *Escherichia coli* of a function *Dictyostelium* myosin tail fragment. 105:2999.
De Luca, M., D'Anna, F., Bondanza, S., Franzi, A. T., and Cancedda, R. Human epithelial cells induce human melanocyte growth in vitro but only skin keratinocytes regulate its proper differentiation in the absence of dermis. 107:1919.
De Martini, J. *See* Moon, Wisniewski, Merz, De Martini, and Wisniewski.
De May, J. *See* Langanger, De May, Moeremans, Daneels, De Brabander, and Small.
Dembitzer, H. M., Herz, F., Schermer, A., Wolley, R. C., and Koss, L. G. Desmosome development in an in vitro model. 85:695.
Dembo, M., and Harris, A. K. Motion of particles adhering to the leading lamella of crawling cells. 91:528.
De Mey, J. *See* De Brabander, Bulinski, Geuens, De Mey, and Borisy.
— *See* Langanger, Moeremans, Daneels, Sobieszek, De Brabander, and De Mey.
— *See* Small, Furst, and De Mey.
— *See* Vantard, Lambert, De Mey, Picquot, and Van Eldik.
de Nechaud, B. *See* Denoulet, Filliatreau, de Nechaud, Gros, and Di Giamberardino.
Deng, J. S., Takasaki, Y., and Tan, E. M. Nonhistone nuclear antigens reactive with autoantibodies. Immunofluorescent studies of distribution in synchronized cells. 91:654.
Denis-Donini, S. *See* Sher, Denis-Donini, Zanini, Bisiani, and Clementi.
Denk, H. *See* Wiche, Krepler, Artlieb, Pytela, and Denk.
Dennerll, T. J., Joshi, H. C., Steel, V. L., Buxbaum, R. E., and Heidemann, S. R. Tension and compression in the cytoskeleton of PC-12 neutites II: quantitative measurements. 107:665.
—, **Lamoureux, P., Buxbaum, R. E., and Heidemann, S. R.** The cytomechanics of axonal elongation and retraction. 109:3073.
Dennis, J. E., Shimizu, T., Reinach, F. C., and Fischman, D. A. Localization of C-protein isoforms in chicken skeletal muscle: ultrastructural detection using monoclonal antibodies. 98:1514.
— *See* Shimizu, Dennis, Masaki, and Fischman.
Dennis, J. W., Carver, J. P., and Schachter, H. Asparagine-linked oligosaccharides in murine tumor cells: comparison of a WGA-resistant (WGA^r) nonmetastatic mutant and a related WGA-sensitive (WGA^s) metastatic line. 99:1034.
—, **Waller, C. A., and Schirrmacher, V.** Identification of ASN-linked oligosaccharides involved in tumor cell adhesion to laminin and type IV collagen. 99:1416.
de Nobel, H. *See* Homan, Musgrave, de Nobel, Wagter, de Wit, Kolk, and van den Ende.
DeNofrio, D., Hoock, T. C., and Herman, I. M. Functional sorting of actin isoforms in microvascular pericytes. 109:191.
Denoulet, P., Filliatreau, G., de Nechaud, B., Gros, F., and Di Giamberardino, L. Differential axonal transport of isotubulins in the motor axons of the rat sciatic nerve. 108:965.
Dentler, W. L. Fractionation of *Tetrahymena* ciliary membranes with Triton X-114 and the identification of a ciliary membrane ATPase. 107:2681.
— Microtubule-membrane interactions in cilia. I. Isolation and characterization of ciliary membranes from *Tetrahymena pyriformis*. 84:364.
—, **Pratt, M. M., and Stephens, R. E.** Microtubule-membrane interactions in cilia. II. Photochemical cross-linking of bridge structures and the identification of a membrane-associated dynein-like ATPase. 84:381.
— *See* Sattilaro, Dentler, and LeCluyse.
— *See* Suprenant and Dentler.
DePasquale, J. A., and Izzard, C. S. Evidence for an actin-containing cytoplasmic precursor of the focal contact and the timing of incorporation of vinculin at the focal contact. 105:2803.
Deppert, W. *See* Staufenbiel and Deppert.
Derick, L. H. *See* Liu, Derick, and Palck.
de Rijk, D. *See* Roossien, de Rijk, Bikker, and Roos.
Dermietzel, R., Yancey, S. B., Traub, O., Willecke, K., and Revel, J.-P. Major loss of the 28-kD protein of gap junction in proliferating hepatocytes. 105:1925.
— *See* Drenckhahn and Dermietzel.
— *See* Traub, Look, Dermietzel, Brümmer, Hülser, and Willecke.
DeRobertis, E. M. *See* Mataj, Lienhard, Zeller, and DeRobertis.
De Roe, C. *See* Opperdoes, Baudhuin, Coppens, De Roe, Edwards, Weijers, and Misset.
DeRosier, D. J., and Tilney, L. G. The structure of the cuticular plate, an in vivo actin gel. 109:2853.
—, **Tilney, L. G., Bonder, E. M., and Frankl, P.** A change in twist of actin provides the force for the extension of the acrosomal process in *Limulus* sperm: the false-discharge reaction. 93:324.
— *See* Bullitt, DeRosier, Coluccio, and Tilney.
— *See* Stokes and DeRosier.
— *See* Tilney, Bonder, and DeRosier.
— *See* Tilney, DeRosier, and Mulroy.
— *See* Tilney, Egelman, DeRosier, and Saunders.
— *See* Tilney, Fukui, and DeRosier.
Der Simonian, H. *See* Galli, Dvorak, Marcum, Ishizaka, Nabel, Der Simonian, Pyne, Goldin, Rosenberg, Cantor, and Dvorak.
Descalzi Cancedda, F., Manduca, P., Tacchetti, C., Fossa, P., Quarto, R., and Cancedda, R. Developmentally regulated synthesis of a low molecular weight protein (Ch 21) by differentiating chondrocytes. 107:2455.

— *See* Castagnola, Moro, Descalzi-Cancedda, and Cancedda.
Deshaies, R. J., and Schekman, R. A yeast mutant defective at an early stage in import of secretory protein precursors into the endoplasmic reticulum. 105:633.
—, and Schekman, R. *SEC62* encodes a putative membrane protein required for protein translocation into the yeast endoplasmic reticulum. 109:2653.
— *See* Böhni, Deshaies, and Schekman.
— *See* Rothblatt, Deshaies, Sander, Daum, and Schekman.
DesJardins, K. C., and Morell, P. The phosphate groups modifying myelin basic proteins are metabolically labile: the methyl groups are stable. 97:438.
Desjarlais, L. J. *See* Paine, Austerberry, Desjarlais, and Horowitz.
de Souza, W. *See* Bonaldo, Souto-Padron, de Souza, and Goldenberg.
Dessau, W., Vertel, B. M., von der Mark, H., and von der Mark, K. Extracellular matrix formation by chondrocytes in monolayer culture. 90:78.
— *See* Conrad, Dessau, and von der Mark.
Detmers, P. A., Goodenough, U. W., and Condeelis, J. Elongation of the fertilization tubule in *Chlamydomonas* new observations on the core microfilaments and the effect of transient intracellular signals on their structural integrity. 97:522.
—, Wright, S. D., Olsen, E., Kimball, B., and Cohn, Z. A. Aggregation of complement receptors on human neutrophils in the absence of ligand. 105:1137.
— *See* Goodenough, Detmers, and Hwang.
Detrich, H. W., III. *See* Wilson, Miller, Pfeffer, Sullivan, and Detrich.
Deuel, T. F. *See* Huang, Huang, and Deuel.
— *See* Pierce, Mustoe, Lingelbach, Masakowski, Griffin, Senior, and Deuel.
— *See* Ryo, Nakeff, Huang, Ginsberg, and Deuel.
— *See* Senior, Griffin, San Huang, Walz, and Deuel.
— *See* Senior, Huang, Griffin, and Deuel.
D'Eugenio-Gumkowski, F. *See* Smith, D'Eugenio-Gumkowski, Yanagisawa, and Jamieson.
D'Eustachio, P. *See* Gupta, Rosen, D'Eustachio, and Ruddle.
— *See* Krauter, Leinwand, D'Eustachio, Ruddle, and Darnell.
Deutsch, C., Taylor, J. S., and Price, M. pH Homeostasis in human lymphocytes: modulation by ions and mitogen. 98:885.
— *See* Lee, Sabath, Deutsch, and Prystowsky.
Deutscher, M. P. The eucaryotic aminoacyl-tRNA synthetase complex: suggestions for its structure and function. 99:373.
Deutzmann, R. *See* Goodman, Deutzmann, and von der Mark.
Devaux, P. F. *See* Cartaud, Sobel, Rousselet, Devaux, and Changeux.
de Vellis, J. *See* McCarthy and de Vellis.
Devillers-Thiéry, A. *See* Kordeli, Cartaud, Nghiêm, Devillers-Thiéry, and Changeux.
Devilliers, G. *See* Mercier, Reggio, Devilliers, Bataille, and Mangeat.
de Vitry, C., Olive, J., Drapier, D., Recouvreur, M., and Wollman, F.-A. Posttranslational events leading to the assembly of photosystem II protein complex: a study using photosynthesis mutants from *Chlamydomonas reinhardtii*. 109:991.
DeVol, D. *See* Bortz, Rotwein, DeVol, Bechtel, Hansen, and Hammerman.
Devore, J. J., Conrad, G. W., and Rappaport, R. A model for astral stimulation of cytokinesis in animal cells. 109:2225.
Devreotes, P. N. *See* Dinauer, MacKay, and Devreotes.
— *See* Dinauer, Steck, and Devreotes.
— *See* Theibert and Devreotes.
DeVries, G. H. *See* Mason, Bigbee, and DeVries.
— *See* Tennekoon, Yoshino, Peden, Bigbee, Rutkowski, Kishimoto, DeVries, and McKhann.
— *See* Yoshino, Dinneen, Lewis, Meador-Woodruff, and DeVries.
— *See* Yoshino, Mason, and DeVries.
Dewald, B. *See* Gennaro, Dewald, Horisberger, Gubler, and Baggiolini.
— *See* Lew, Monod, Waldvogel, Dewald, Baggiolini, and Pozzan.
Dewey, M. M. *See* Walcott and Dewey.
de Wildt, P. *See* Kooijman, de Wildt, Beumer, van der Vliet, Homan, Kalshoven, Musgrave, and van den Ende.
de Wit, D. *See* Homan, Musgrave, de Nobel, Wagter, de Wit, Kolk, and van den Ende.
Dewit, M. *See* Schuster, Dewit, Stachelin, and Ohad.
DeWit, M. *See* Seibert, DeWit, and Staehelin.
Dexter, T. M. *See* Spooncer, Gallagher, Krizsa, and Dexter.
Dharmawardhane, S. *See* Hall, Warren, Dharmawardhane, and Condeelis.
Dharmsathaphorn, K. *See* Madara and Dharmsathaphorn.
Diakun, G. P. *See* Bordas, Mant, Diakun, and Nave.
Diamant, M. *See* Olsson, Due, and Diamant.
Díaz-Nido, J., Serrano, L., Méndez. E., and Avila, J. A casein kinase II–related activity is involved in phosphorylation of microtubule-associated protein MAP-1B during neuroblastoma cell differentiation. 106:2057.
— *See* Serrano, Diáz-Nido, Wandosell, and Avila.
DiBartolomeis, M. J. *See* Vallee, DiBartolomeis, and Theurkauf.
Dibona, D. R. *See* Berglindh, Dibona, Pace, and Sachs.
Dice, J. F. *See* Neff, Bourret, Miao, and Dice.
Dick, J. S. B., II. *See* Goodenough, Dick, and Lyons.
Dickens, G. *See* Lazarovici, Dickens, Kuzuya, and Guroff.
Dickersin, K. *See* Sloboda and Dickersin.
Dickerson, K. *See* Engvall, Davis, Dickerson, Rouslahti, Varon, and Manthorpe.
Dickinson, M. A. J. *See* Klein, Brown, Oegema, Brenchley, Anderson, Dickinson, Horigan, and Hassell.
Dickson, G. *See* Doherty, Barton, Dickson, Seaton, Rowett, Moore, Gower, and Walsh.
— *See* Pizzey, Rowett, Barton, Dickson, and Walsh.
Dickson, I. R. *See* Kwan, Dickson, Freemont, and Grant.
Dickson, J. G. *See* Fayet, Hovsépian, Dickson, and Lissitzky.
— *See* Moore, Thompson, Kirkness, Dickson, and Walsh.
Dickson, R. B., Willingham, M. C., and Pastan, I. α_2-Macroglobulin adsorbed to colloidal gold: a new probe in the study of receptor-mediated endocytosis. 89:29.
Dicorleto, P. *See* Gajdusek, Dicorleto, Ross, and Schwartz.
DiCorleto, P. E. *See* Bowen-Pope, DiCorleto, and Ross.
Dietrich, A. J. J. *See* Moens, Heyting, Dietrich, van Raamsdonk, and Chen.
Dietz, M. E. *See* Godfrey, Dietz, Morstad, Wallskog, and Yorde.
Dietz, R. *See* Steffen, Fuge, Dietz, Bastmeyer, and Müller.
DiFlorio, R. *See* Terranova, DiFlorio, Lyall, Hic, Friesel, and Maciag.
Diggins, M. A., and Dove, W. F. Distribution of acetylated alpha-tubulin in *Physarum polycephalum*. 104:303.
Di Giamberardino, L. *See* Denoulet, Filliatreau, de Nechaud, Gros, and Di Giamberardino.
Di Gioia, G. *See* Navone, Di Gioia, Jahn, Browning, Greengard, and De Camilli.
— *See* Navone, Jahn, Di Gioia, Stukenbrok, Greengard, and De Camilli.
Diglio, C. A., Wolfe, D. E., and Meyers, P. Transformation of rat cerebral endothelial cells by Rous sarcoma virus. 97:15.
DiLullo, C. *See* Bennett and DiLullo.
Dilworth, S. M. *See* Dingwall, Robbins, Dilworth, Roberts, and Richardson.
DiMario, P. J., and Mahowald, A. P. *Female sterile (1) yolkless:* a recessive female sterile mutation in *Drosophila melanogaster* with depressed numbers of coated pits and coated vesicles within the developing oocytes. 105:199.
Di Mauro, S. *See* Martinuzzi, Askanas, Kobayashi, Engel, and Di Mauro.
Dimond, R. L. *See* Cardelli, Golumbeski, and Dimond.
— *See* Ebert, Freeze, Richardson, Dimond, and Cardelli.
— *See* Mierendorf, Cardelli, and Dimond.
— *See* Richardson, Woychik, Ebert, Dimond, and Cardelli.
Dinauer, M. C., MacKay, S. A., and Devreotes, P. N. Cyclic 3′,5′-AMP relay in *Dictyostelium discoideum*. III. The relationship of cAMP synthesis and secretion during the cAMP signaling response. 86:537.
—, Steck, T. L., and Devreotes, P. N. Cyclic 3′,5′-AMP relay in *Dictyostelium discoideum*. IV. Recovery of the cAMP signaling response after adaptation to cAMP. 86:545.
—, Steck, T. L., and Devreotes, P. N. Cyclic 3′,5′-AMP relay in *Dictyostelium discoideum*. V. Adaptation of the cAMP signaling response during cAMP stimulation. 86:554.
Dingle, A. D. *See* Larson and Dingle.
Dingus, J., Hwo, S., and Bryan, J. Identification by monoclonal antibodies and characterization of human platelet caldesmon. 102:1748.
— *See* Carron, Hwo, Dingus, Benson, Meza, and Bryan.
— *See* Rosenfeld, Hou, Dingus, Meza, and Bryan.
Dingwall, C., Robbins, J., Dilworth, S. M., Roberts, B., and Richardson, W. D. The nucleoplasmin nuclear location sequence is larger and more complex than that of SV-40 large T antigen. 107:841.
Dinneen, M. P. *See* Yoshino, Dinneen, Lewis, Meador-Woodruff, and DeVries.
Di Padua Mathieu, D., Mura, C. V., Frado, L. L., Woodcock, C. L., and Stollar, B. D. Differing accessibility in chromatin of the antigenic sites of regions 1-58 and 63-125 of histone H2B. 91:135.
DiPaola, M. *See* Keith, DiPaola, Maxfield, and Shelanski.
diPorzio, U. *See* van den Pol, diPorzio, and Rutishauser.
Dirkx, J. *See* Lambotte, Falmagne, Capiau, Zamen, Ruysschaert, and Dirkx.
Di Salvo, J. *See* Schreiber, Kenney, Kowalski, Thomas, Gimenez-Gallego, Rios-Candelore, Di Salvo, Barritault, Courty, Courtois, Moenner, Loret, Burgess, Mehlman, Friesel, Johnson, and Maciag.
DiScala, V. A. *See* Muller, Kachadorian, and DiScala.
Discher, N. R. *See* Kohtz, Discher, Inagami, and Goldman.
Disney, J. E., Johnson, K. R., Magnuson, N. S., Sylvester, S. R., and Reeves, R. High-mobility group protein HMG-I localizes to G/Q- and C-bands of human and mouse chromosomes. 109:1975.
DiStefano, P. S., Schweitzer, J. B., Taniuchi, M., and Johnson, E. M.,

Jr. Selective destruction of nerve growth factor receptor–bearing cells in vitro using a hybrid toxin composed of ricin A chain and a monoclonal antibody against the nerve growth factor receptor. 101:1107.
— *See* Martin, Schmidt, DiStefano, Lowry, Carter, and Johnson.
Distel, B., Van Der Leÿ, I., Veenhuis, M., and Tabak, H. F. Alcohol oxidase expressed under nonmethylotrophic conditions is imported, assembled, and enzymatically active in peroxisomes of *Hansenula polymorpha*. 107:1669.
Distel, R. J. *See* Spiegelman, Distel, Ro, Rosen, and Satterberg.
Di Virgilio, F., Meyer, B. C., Greenburg, S., and Silverstein, S. C. Fc receptor–mediated phagocytosis occurs in macrophages at exceedingly low cytosolic Ca^{2+} levels. 106:657.
— *See* Vicentini, Ambrosini, Di Virgilio, Pozzan, and Meldolesi.
Dixit, V. M. *See* Galvin, Dixit, O'Rourke, Santoro, Grant, and Frazier.
— *See* Galvin, Vance, Dixit, Fink, and Frazier.
— *See* Majack, Goodman, and Dixit.
— *See* O'Shea and Dixit.
— *See* Prochownik, O'Rourke, and Dixit.
Dixon, C. K. *See* Moehle, Dixon, and Jones.
Dixon, J. E. *See* Noc, Andrews, Dixon, and Spiess.
Dixon, S. J., Stewart, D., Grinstein, S., and Spiegel, S. Transmembrane signaling by the B subunit of cholera toxin: increased cytoplasmic free calcium in rat lymphocytes. 105:1153.
Djondjurov, L. P. *See* Tsanev and Djondjurov.
Dlugosz, A. A., Antin, P. B., Nachmias, V. T., and Holtzer, H. The relationship between stress fibers and nascent myofibrils in cultured cardiac myocytes. 99:2268.
Dobberstein, B. *See* Haeuptle, Flint, Gough, and Dobberstein.
— *See* Lipp and Dobberstein.
— *See* Lipp, Flint, Haeuptle, and Dobberstein.
— *See* Meyer and Dobberstein.
— *See* Meyer, Louvard, and Dobberstein.
Dobson, M. E. *See* Kane, Stanton, Raymond, Dobson, Knafelc, and Farber.
Dockstader, J. *See* Bok, Dockstader, and Horwitz.
Doctor, B. P. *See* Abramson, Ellisman, Deerinck, Maulet, Gentry, Doctor, and Taylor.
Doctor, J., Fristrom, D., and Fristrom, J. W. The pupal cuticle of *Drosophila*: biphasic synthesis of pupal cuticle proteins in vivo and in vitro in response to 20-hydroxyecdysone. 101:189.
Doctrow, S. R., and Folkman, J. Protein kinase C activators suppress stimulation of capillary endothelial cell growth by anglogenic endothelial mitogens. 104:679.
Dodson, W. C. *See* Ernst, Dodson, and Karnaky.
Doetschman, T. C. *See* Grove, Kurer, Lehner, Doetschman, Perriard, and Eppenberger.
— *See* Wallimann, Doetschman, and Eppenberger.
Doherty, J.-J. II. *See* Lai, Cameron, Doherty, Posner, and Bergeron.
— *See* Lai, Cameron, Wada, Doherty, Kay, Posner, and Bergeron.
Doherty, P., Barton, C. H., Dickson, G., Seaton, P., Rowett, L. H., Moore, S. E., Gower, H. J., and Walsh, F. S. Neuronal process outgrowth of human sensory neurons on monolayers of cells transfected with cDNAs for five human N-CAM isoforms. 109:789.
—, **Mann, D. A., and Walsh, F. S.** Comparison of the effects of nerve growth factor, activators of protein kinase C, and a calcium ionophore on the expression of THY-1 and N-CAM in PC12 cell cultures. 107:333.
Dolan, W. J. *See* Griepp, Dolan, Robbins, and Sabatini.
Dolby, T. W., Belmont, A., Borun, T. W., and Nicolini, C. DNA replication, chromatin structure, and histone phosphorylation altered by theophylline in synchronized HeLa S3 cells. 89:78.
Dolly, J. O. *See* Black and Dolly.
Domenicucci, C. *See* Wrana, Maeno, Hawrylyshyn, Yao, Domenicucci, and Sodek.
Domingo, C. *See* Krotski, Domingo, and Bronner-Fraser.
Doms, R. W., Keller, D. S., Helenius, A., and Balch, W. E. Role for ATP in regulating the assembly and transport of vesicular stomatitis virus G protein trimers. 105:1957.
—, **Russ, G., and Yewdell, J. W.** Brefeldin A redistributes resident and itinerant Golgi proteins to the endoplasmic reticulum. 109:61.
—, **Ruusala, A., Machamer, C., Helenius, J., Helenius, A., and Rose, J. K.** Differential effects of mutations in three domains on folding, quaternary structure, and intracellular transport of vesicular stomatitus virus G protein. 107:89.
— *See* Boulay, Doms, Webster, and Helenius.
— *See* Copeland, Doms, Bolzau, Webster, and Helenius.
— *See* Gething, Doms, York, and White.
Donaldson, C. A. *See* Mangelsdorf, Koeffler, Donaldson, Pike, and Haussler.
Donaldson, D. J., Mahan, J. T., Hasty, D. L., McCarthy, J. B., and Furcht, L. T. Location of a fibronectin domain involved in newt epidermal cell migration. 101:73.
Donini, S. D. *See* De Camilli, Moretti, Donini, Walter, and Lohmann.
Donoghue, D. J. *See* Hannink and Donoghue.
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Dorbic, T. *See* Wittig, Dorbic, and Rich.
Dorée, M. *See* Picard, Capony, Brautigan, and Dorée.
Dorel, C., Voelker, T. A., Herman, E. M., and Chrispeels, M. J. Transport of the proteins to the plant vacuole is not by bulk flow through the secretory system, and requires positive sorting information. 108:327.
Doriaux, M. *See* Woods, Doriaux, and Farquhar.
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Dorn, A. *See* Gramzow, Bachmann, Uhlenbruck, Dorn, and Müller.
Dorne, A.-J., Joyard, J., Block, M. A., and Douce, R. Localization of phosphatidylcholine on outer envelope membrane of spinach chloroplasts. 100:1690.
Dorner, A. J., Bole, D. G., and Kaufman, R. J. The relationship of N-linked glycosylation and heavy chain–binding protein association with the secretion of glycoproteins. 105:2665.
Dotti, C. *See* Bacallao, Antony, Dotti, Karsenti, Stelzer, and Simons.
Dotto, G. P., Moellmann, G., Ghosh, S., Edwards, M., and Halaban, R. Transformation of murine melanocytes by basic fibroblast growth factor cDNA and oncogenes and selective suppression of the transformed phenotype in a reconstituted cutaneous environment. 109:3115.
Douce, R. *See* Dorne, Joyard, Block, and Douce.
Douglas, M. G. *See* Emr, Vassarotti, Garrett, Geller, Takeda, and Douglas.
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— *See* Diggins and Dove.
— *See* Schedl, Burland, Gull, and Dove.
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Downie, T. *See* Foley, MacGregor, Kusel, Garland, Downie, and Moore.
Downing, S. W., Spitzer, R. H., Koch, E. A., and Salo, W. L. The hagfish sliine gland thread cell. I. A unique cellular system for the study of intermediate filaments and intermediate filament-microtubule interactions. 98:653.
Downing, T. W. *See* Spitzer, Downing, Koch, Salo, and Saidel.
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Doyle, B. G. *See* Jackson and Doyle.
Doyle, C., Roth, M. G., Sambrook, J., and Gething, M.-J. Mutations in the cytoplasmic domain of the influenza virus hemagglutinin affect different stages of intracellular transport. 100:704.
—, **Sambrook, J., and Gething, M.-J.** Analysis of progressive deletions of the transmembrane and cytoplasmic domains of influenza hemagglutinin. 103:1193.
— *See* Roth, Doyle, Sambrook, and Gething.
Doyle, D. *See* Baumann, Gelehrter, and Doyle.
— *See* Cook, Hou, Hou, Cairo, and Doyle.
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Dozin, B. *See* Castagnola, Dozin, Moro, and Cancedda.
Dozzio, N. *See* Pozzan, Gatti, Dozzio, Vicentini, and Meldolesi.
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Drake, D. K., and Rosen, S. D. Identification and purification of an endogenous receptor for the lectin pallidin from *Polysphondylium pallidum*. 93:383.
Drake, T. A., Ruf, W., Morrissey, J. H., and Edgington, T. S. Functional tissue factor is entirely cell surface expressed on lipopolysaccharide-stimulated human blood monocytes and a constitutively tissue factor–producing neoplastic cell line. 109:389.
Draper, R. K., and Simon, M. I. The entry of diphtheria toxin into the mammalian cell cytoplasm: Evidence for lysosomal involvement. 87:849.
— *See* Colbaugh, Stookey, and Draper.
— *See* Marnell, Mathis, Stookey, Shia, Stone, and Draper.
— *See* Marnell, Stookey, and Draper.
Drapier, D. *See* de Vitry, Olive, Drapier, Recouvreur, and Wollman.
Draye, J.-P., Courtoy, P. J., Quintart, J., and Baudhuin, P. A quantitative model of traffic between plasma membrane and secondary lysosomes: evaluation of inflow, lateral diffusion, and degradation. 107:2109.
Drees, B. *See* Gruenbaum, Landesman, Drees, Bare, Saumweber, Paddy, Sedat, Smith, Benton, and Fisher.
Dreesen, T. D., Lezzi, M., and Case, S. T. Developmentally regulated expression of a Balbiani ring 1 gene for a 18-kD secretory polypeptide in *Chironomus tentans* salivary glands before larval/pupal ecdysis. 106:21.

Drenckhahn, D., and Dermietzel, R. Organization of the actin filament cytoskeleton in the intestinal brush border: a quantitative and qualitative immunoelectron microscope study. 107:1037.
—, **and Franz, H.** Identification of actin-, α-actinin-, and vinculin-containing plaques at the lateral membrane of epithelial cells. 102:1843.
—, **and Groschel-Stewart, U.** Localization of myosin, actin, and tropomyosin in rat intestinal epithelium: immunohistochemical studies at the light and electron microscope levels. 86:475.
—, **and Wagner, J.** Stress fibers in the splenic sinus endothelium in situ: molecular structure, relationship to the extracellular matrix, and contractility. 102:1738.
— *See* Achler, Filmer, Merte, and Drenckhahn.
— *See* Tilney, Tilney, Stephens, Merte, Drenckhahn, Cotanche, and Bretscher.
Drescher, K. *See* Vicker, Schill, and Drescher.
Dresser, M. E., and Giroux, C. N. Meiotic chromosome behavior in spread preparations of yeast. 106:567.
Drews, U. *See* Oettling, Schmidt, and Drews.
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Dreyer, C. *See* Zimmer, Dreyer, and Hausen.
Dreyfuss, G., Philipson, L., and Mattaj, I. W. Ribonucleoprotein particles in cellular processes. 106:1419.
— *See* Choi and Dreyfuss.
— *See* Piñol-Roma, Swanson, Gall, and Dreyfuss.
Drickamer, K. *See* Graeve, Drickamer, and Rodriguez-Boulan.
Driscoll, M., Dean, E., Reilly, E., Bergholz, E., and Chalfie, M. Genetic and molecular analysis of a *Caenorhabditis elegans* β-tubulin that conveys benzimidazole sensitivity. 109:2993.
Drivas, D. T. *See* Cheung, Drivas, Littau, and Johnson.
Drubin, D., Kobayashi, S., Kellogg, D., and Kirschner, M. Regulation of microtuble protein levels during cellular morphogenesis in nerve growth factor–treated PC12 cells. 106:1583.
Drubin, D. G., Caput, D., and Kirschner, M. W. Studies on the expression of the microtubule-associated protein, tau, during mouse brain development, with newly isolated complementary DNA probes. 98:1090.
—, **Feinstein, S. C., Shooter, E. M., and Kirschner, M. W.** Nerve growth factor–induced neurite outgrowth in PC12 cells involves and the coordinate induction of microtubule assembly and assembly-promoting factors. 101:1799.
—, **and Kirschner, M. W.** Tau protein function in living cells. 103:2739.
—, **Miller, K. G., and Botstein, D.** Yeast actin-binding proteins: evidence for a role in morphogenesis. 107:2551.
— *See* Pfeffer, Drubin, and Kelly.
Drummond, D. R., McCrae, M. A. and Colman, A. Stability and movement of mRNAs and their encoded proteins in *Xenopus* oocytes. 100:1148.
Duband, J.-L., Dufour, S., Hatta, K., Takeichi, M., Edelman, G. M., and Thiery, J. P. Adhesion molecules during somatogenesis in the avian embryo. 104:1361.
—, **Nuckolls, G. H., Ishihara, A., Hasegawa, T., Yamada, K. M., Thiery, J. P., and Jacobson, K.** Fibronectin receptor exhibits high lateral mobility in embryonic locomoting cells but is immobile in focal contacts and fibrillar streaks in stationary cells. 107:1385.
—, **Rocher, S., Chen, W.-T., Yamada, K. M., and Thiery, J.-P.** Cell adhesion and migration in the early vertebrate embryo: location and possible role of the putative fibronectin receptor complex. 102:160.
—, **Rocher, S., Chen, W.-T., Yamada, K. M., and Thiery, J.-P.** Correction. 102:2325.
Dubinsky, J. M., Loftus, D. J., Fischbach, G. D., and Elson, E. L. Formation of acetylcholine receptor clusters in chick myotubes: migration or new insertion? 109:1733.
Dublet, B. *See* Sugrue, Gordon, Seyer, Dublet, van der Rest, and Olsen.
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Dubois, P. *See* Pfeiffer, Jakob, Mikoshiba, Dubois, Guenet, Nicolas, Gaillard, Chevance, and Jacob.
Dubois-Dalcq, M., Behar, T., Hudson, L., and Lazzarini, R. A. Emergence of three myelin proteins in oligodendrocytes cultured without neurons. 102:384.
— *See* Baron-Van Evercooren, Kleinman, Seppä, Rentier, and Dubois-Dalcq.
— *See* Geller and Dubois-Dalcq.
— *See* Godfraind, Friedrich, Holmes, and Dubois-Dalcq.
— *See* Hudson, Friedrich, Behar, Dubois-Dalcq, and Lazzarini.
Dubreuil, C. *See* Kordeli, Cartaud, Nghiêm, Pradel, Dubreuil, Paulin, and Changeux.
Dubreuil, R., Byers, T. J., Branton, D., Goldstein, L. S. B., and Kiehart, D. P. *Drosophila* spectrin. I. Characterization of the purified protein. 105:2095.
— *See* Byers, Dubreuil, Branton, Kiehart, and Goldstein.
— *See* Pesacreta, Byers, Dubreuil, Kiehart, and Branton.
Dubreuil, R. R., and Bouck, G. B. The membrane skeleton of a unicellular organism consists of bridged, articulating strips. 101:1884.
—, **Byers, T. J., Sillman, A. L., Bar-Zvi, D., Goldstein, L. S. B., and Branton, D.** The complete sequence of *Drosophila* alpha-spectrin: conservation of structural domains between alpha-spectrins and alph-actinin. 109:2197.
—, **Rosiere, T. K., Rosner, M. C., and Bouck, G. B.** Properties and topography of the major integral plasma membrane protein of a unicellular organism. 107:191.
— *See* Byers, Husain-Chishti, Dubreuil, Branton, and Goldstein.
Dudas, G. *See* Gatmaitan, Jefferson, Ruiz-Opazo, Biempica, Arias, Dudas, Leinwand, and Reid.
Duden, R., and Franke, W. W. Organization of desmosomal plaque proteins in cells growing at low calcium concentrations. 107:1049.
Dudouet, B., Robine, S., Huet, C., Sahuquillo-Merino, C., Blair, L., Coudrier, E., and Louvard, D. Changes in villin synthesis and subcellular distribution during intestinal differentiation of HT29–18 clones. 105:359.
Due, C. *See* Olsson, Due, and Diamant.
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Dufour, S. *See* Duband, Dufour, Hatta, Takeichi, Edelman, and Thiery.
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Duggan, K. *See* Buck, Shea, Duggan, and Horwitz.
— *See* Decker, Greggs, Duggan, Stubbs, and Horwitz.
— *See* Horwitz, Duggan, Greegs, Decker, and Buck.
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Dunbar, B. S. *See* Simmen, Dunbar, Guerriero, Chafouleas, Clark, and Means.
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Duncan, K. G. *See* Fessler, Campbell, Duncan, and Fessler.
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Dunn, G. A. *See* Wilkinson, Lackie, Forrester, and Dunn.
Dunn, K. W., McGraw, T. E., and Maxfield, F. R. Iterative fractionation of recycling receptors from lysosomally destined ligands in an early sorting endosome. 109:3303.
— *See* McGraw, Dunn, and Maxfield.
Dunn, W. A., Connolly, T. P., and Hubbard, A. L. Receptor-mediated endocytosis of epidermal growth factor by rat hepatocytes: receptor pathway. 102:24.
—, **and Hubbard, A. L.** Receptor-mediated endocytosis of epidermal growth factor by hepatocytes in the perfused rat liver: ligand and receptor dynamics. 98:2148.
Dunphy, W. G., and Newport, J. W. Mitosis-inducing factors are present in a latent form during interphase in the *Xenopus* embryo. 106:2047.
—, **and Rothman, J. E.** Compartmentation of asparagine-linked oligosaccharide processing in the Golgi apparatus. 97:270.
Duperray, A., Berthier, R., Chagnon, E., Ryckewaert, J.-J., Ginsberg, M., Plow, E., and Marguerie, G. Biosynthesis and processing of platelet GPIIb–IIIa in human megakaryocytes. 104:1665.
Duran, S. *See* Hill, Duran, Lin, Weber, and Holtzer.
— *See* Lin, Eshelman, Forry-Schaudies, Duran, Lessard, and Holtzer.
Durand, M. *See* Miller, Naus, Durand, Bloom, and Milner.
Durkin, M. E., Chakravarti, S., Bartos, B. B., Liu, S.-H., Friedman, R. L., and Chung, A. E. Amino acid sequence and domain structure of entactin. Homology with epidermal growth factor precursor and low density lipoprotein receptor. 107:2751.
Dustin, M. L., and Springer, T. A. Lymphocyte function–associated antigen-1 (LFA-1) interaction with intercellular adhesion molecule-1 (ICAM-1) is one of at least three mechanisms for lymphocyte adhesion to cultured endothelial cells. 107:321.
Duszenko, M., Ivanov, I. E., Ferguson, M. A. J., Plesken, H., and Cross, G. A. M. Intracellular transport of a variant surface glycoprotein in *Trypanosoma brucei*. 106:77.
Dutcher, S. K., Huang, B., and Luck, D. J. L. Genetic dissection of the central pair microtubules of the flagella of *Chlamydomonas reinhardtii*. 98:229.

Dute, R. R. *See* Adoutte, Ramanathan, Lewis, Dute, Ling, Kung, and Nelson.
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— *See* Tokuyasu, Dutton, and Singer.
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Duysen, M. E. *See* Alien, Duysen, and Staehelin.
Dvorak, A. M., Hammel, I., Schulman, E. S., Peters, S. P., MacGlashan, D. W., Jr., Schleimer, R. P., Newball, H. H., Pyne, K., Dvorak, H. F. Lichtenstein, L. M., and Galli, S. J. Differences in the behavior of cytoplasmic granules and lipid bodies during human lung mast cell degranulation. 99:1678.
— *See* Galli, Dvorak, Marcum, Ishizaka, Nabel, Der Simonian, Pyne, Goldin, Rosenberg, Cantor, and Dvorak.
— *See* Hammel, Dvorak, Peters, Schulman, Dvorak, Lichtenstein, and Galli.
Dvorak, H. F. *See* Dvorak, Hammel, Schulman, Peters, MacGlashan, Schleimer, Newball, Pyne, Dvorak, Lichtenstein, and Galli.
— *See* ffrench-Constant, Van De Water, Dvorak, and Hynes.
— *See* Galli, Dvorak, Marcum, Ishizaka, Nabel, Der Simonian, Pyne, Goldin, Rosenberg, Cantor, and Dvorak.
— *See* Hammel, Dvorak, Peters, Schulman, Dvorak, Lichtenstein, and Galli.
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—, **Lanford, R. E., and Feldherr, C. M.** The effects of variations in the number and sequence of targeting signals on nuclear uptake. 107:1279.
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Earnshaw, W. C. Anionic regions in nuclear proteins. 105:1479.
—, **Halligan, B., Cooke, C. A., Heck, M. M. S., and Liu, L. F.** Topoisomerase II is a structural component of mitotic chromosome scaffolds. 100:1706.
—, **Halligan, N., Cooke, C., and Rothfield, N.** The kinetochore is part of the metaphase chromosome scaffold. 98:352.
—, **and Heck, M. M. S.** Localization of topoisomerase II in mitotic chromosomes. 100:1716.
—, **and Laemmli, U. K.** Architecture of metaphase chromosomes and chromosome scaffolds. 96:84.
—, **Rekvig, O. P., and Hannestad, K.** Histones synthesized for use in early development of *Xenopus laevis* are stored as a complex with antigenic properties similar to those of the octamer core of nucleosomes. 92:871.
—, **Sullivan, K. F., Machlin, P. S., Cooke, C. A., Kaiser, D. A., Pollard, T. D., Rothfield, N. F., and Cleveland, D. W.** Molecular cloning of cDNA for CENP-B, the major human centromere autoantigen. 104:817.
— *See* Cooke, Heck, and Earnshaw.
— *See* Heck and Earnshaw.
East, I. J., and Dean, J. Monoclonal antibodies as probes of the distribution of ZP-2, the major sulfated glycoprotein of the murine zona pellucida. 98:795.
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Eaton, J. W. *See* Wiser, Wood, Eaton, and Sheppard.
Ebert, D. L., Freeze, H. H., Richardson, J., Dimond, R. L., and Cardelli, J. A. A *Dictyostelium discoideum* mutant that missorts and oversecretes lysosomal enzyme precursors is defective in endocytosis. 109:1445.
— *See* Richardson, Woychik, Ebert, Dimond, and Cardelli.
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— *See* Vacquier, Moy, Trimmer, Ebina, and Porter.
Ecarot-Charrier, B., Glorieux, F. H., van der Rest, M., and Pereira, G. Osteoblasts isolated from mouse calvaria initiate matrix mineralization in culture. 96:639.
Echlin, P. *See* Saubermann, Echlin, Peters, and Beeuwkes.
Eckert, B. S., Daley, R. A., and Parysek, L. M. Assembly of keratin onto PtK_1 cytoskeletons: evidence for an intermediate filament organizing center. 92:575.
—, **Koons, S. J., Schantz, A. W., and Zobel, C. R.** Association of creatine phosphokinase with the cytoskeleton of cultured mammalian cells. 86:1.
Eckmiller, M. S. Cone outer segment morphogenesis: taper change and distal invaginations. 105:2267.
Eckstein, D. J., and Shur, B. D. Laminin induces the stable expression of surface galactosyltransferase on lamellipodia of migrating cells. 108:2507.
Ecob-Prince, M. S., Jenkison, M., Butler-Browne, G. S., and Whalen, R. G. Neonatal and adult myosin heavy chain isoforms in a nerve–muscle culture system. 103:995.
Edelman, G. M. *See* Brackenbury, Greenberg, and Edelman.
— *See* Chuong, Crossin, and Edelman.
— *See* Chuong and Edelman.
— *See* Crossin, Edelman, and Cunningham.
— *See* Crossin, Hoffman, Grumet, Thiery, and Edelman.
— *See* Daniloff, Crossin, Pinçon-Raymond, Murawsky, Rieger, and Edelman.
— *See* Daniloff, Levi, Grumet, Rieger, and Edelman.
— *See* Duband, Dufour, Hatta, Takeichi, Edelman, and Thiery.
— *See* Friedlander, Brackenbury, and Edelman.
— *See* Friedlander, Grumet, and Edelman.
— *See* Friedlander, Hoffman, and Edelman.
— *See* Greenberg, Brackenbury, and Edelman.
— *See* Grumet and Edelman.
— *See* Hoffman, Crossin, and Edelman.
— *See* Hoffman, Friedlander, Chuong, Grumet, and Edelman.
— *See* Levi, Crossin, and Edelman.
— *See* Murray, Hemperly, Prediger, Edelman, and Cunningham.
— *See* Murray, Owens, Prediger, Crossin, Cunningham, and Edelman.
— *See* Reiger, Grumet, and Edelman.
— *See* Rieger, Daniloff, Pinçon-Raymond, Crossin, Grumet, and Edelman.
— *See* Rieger, Nicolet, Pinçon-Raymond, Murawsky, Levi, and Edelman.
— *See* Rutishauser and Edelman.
— *See* Rutishauser, Grumet, and Edelman.
— *See* Thiery, Delouvée, Grumet, and Edelman.
Eder, H. A. *See* Handley, Arbeeny, Eder, and Chien.
Edgar, D., Timpl, R., and Thoenen, H. Structural requirements for the stimulation of neurite outgrowth by two variants of laminin and their inhibition by antibodies. 106:1299.
— *See* Acheson, Edgar, Timpl, and Thoenen.
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Edgington, T. S. *See* Altieri, Bader, Mannucci, and Edgington.
— *See* Drake, Ruf, Morrissey, and Edgington.
Edidin, M., and Wei, T. Lateral diffusion of H-2 antigens on mouse fibroblasts. 95:458.
—, **Wei, T., and Gotlib, L.** Diffusion rates of cell surface antigens of mouse-human heterokaryons. III. Regulation of lateral diffusion rates by calcium ions. 95:453.
—, **and Zuniga, M.** Lateral diffusion of wild-type and mutant L^d antigens in L cells. 99:2333.
— *See* Madreperla, Edidin, and Adler.
— *See* Salas, Vega-Salas, Hochman, Rodriguez-Boulan, and Edidin.
— *See* Schreiber, Schlessinger, and Edidin.
— *See* Wade, Freed, and Edidin.
— *See* Wier and Edidin.
— *See* Yechiel and Edidin.
— *See* Ziomek, Schulman, and Edidin.
Edmondson, J. C., Liem, R. K. H., Kuster, J. E., and Hatten, M. E. Astrotactin: a novel neuronal cell surface antigen that mediates neuron–astroglial interactions in cerebellar microcultures. 106:505.
Edwards, D. R. *See* Nomura, Wills, Edwards, Heath, and Hogan.
Edwards, H. C., and Booth, A. G. Calcium-sensitive, lipid-binding cytoskeletal proteins of the human placental microvillar region. 105:303.
Edwards, H. H. *See* Phillips, Jennings, and Edwards.
Edwards, K. B. *See* Varnum, Edwards, and Soll.
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Edwards, S. W. *See* Opperdoes, Baudhuin, Coppens, De Roe, Edwards, Weijers, and Misset.
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— *See* Woodman and Edwardson.
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Eguchi, G. *See* Owaribe and Eguchi.
— *See* Owaribe, Kodama, and Eguchi.
Egyhazi, E., and Holst, M. Adenosine selectively inhibits labeling of chromosomal RNA, especially hnRNA, probably by acting at or near the site of chain initiation. 89:1.
Egyházi, E., Pigon, A., Ossoinak, A., Holst, M., and Tayip, U. Phos-

phorylation of some chromosomal nonhistone proteins in active genes is blocked by the transcription inhibitor DRB. 98:954.
Ehring, G. R. *See* Zampighi, Hall, Ehring, and Simon.
Eich-Bender, S. G. *See* Bruckner, Hörler, Mendler, Houze, Winterhalter, Eich-Bender, and Spycher.
— *See* Mendler, Eich-Bender, Vaughan, Winterhalter, and Bruckner.
Eichele, G., and Thaller, C. Characterization of concentration gradients of a morphogenetically active retinoid in the chick limb bud. 105:1917.
—, **Tickle, C., and Alberts, B. M.** Studies on the mechanism of retinoid-induced pattern duplications in the early chick limb bud: temporal and spatial aspects. 101:1913.
Eichner, R., Bonitz, P., and Sun, T.-T. Classification of epidermal keratins according to their immunoreactivity, isoelectric point, and mode of expression. 98:1388.
—, **Sun, T.-T., and Aebi, U.** The role of keratin subfamilies and keratin pairs in the formation of human epidermal intermediate filaments. 102:1767.
— *See* Weiss, Eichner, and Sun.
— *See* Woodcock-Mitchell, Eichner, Nelson, and Sun.
Eidelman, O. *See* Sarkar, Morris, Eidelman, Zimmerberg, and Blumenthal.
Eilers, U., Klumperman, J., and Hauri, H.-P. Nocodazole, a microtubule-active drug, interferes with apical protein delivery in cultured intestinal epithelial cells (Caco-2). 108:13.
Einck, L., and Bustin, M. Functional histone antibody fragments traverse the nuclear envelope. 98:205.
Einspahr, K. J., Maeda, M., and Thompson, G. A., Jr. Concurrent changes in *Dunaliella salina* ultrastructure and membrane phospholipid metabolism after hyperosmotic shock. 107:529.
Einstein, R., and Gabel, C. A. Serum factors alter the extent of dephosphorylation of ligands endocytosed via the mannose 6-phosphate/insulin-like growth factor II receptor. 109:1037.
Eipper, B. A. *See* Mains and Eipper.
Eisen, A., Kiehart, D. P., Wieland, S. J., and Reynolds, G. T. Temporal sequence and spatial distribution of early events of fertilization in single sea urchin eggs. 99:1647.
—, **and Reynolds, G. T.** Calcium transients during early development in single starfish (*Asterias forbesi*) oocytes. 99:1871.
—, **and Reynolds, G. T.** Source and sinks for the calcium released during fertilization of single sea urchin eggs. 100:1522.
Eisenbach, L., Ramanathan, R., and Nelson, D. L. Biochemical studies of the excitable membrane of *Paramecium tetraurelia*. IX. Antibodies against ciliary membrane proteins. 97:1412.
Eisenberg, B. R. *See* Wenderoth and Eisenberg.
Eisenhaure, B. H. *See* Davies, Truskey, Warren, O'Connor, and Eisenhaure.
Eissenberg, J. C. *See* Steiner, Eissenberg, and Elgin.
Ekblom, P. Formation of basement membranes in the embryonic kidney: an immunohistological study. 91:1.
—, **Lehtonen, E., Saxen, L., and Timpl, R.** Shift in collagen type as early response to induction of the metanephric mesenchyme. 89:276.
— *See* Aufderheide, Chiquet-Ehrismann, and Ekblom.
— *See* Aufderheide and Ekblom.
— *See* Landschultz, Thesleff, and Ekblom.
— *See* Mugrauer, Alt, and Ekblom.
— *See* Risau and Ekblom.
— *See* Sariola, Kuusela, and Ekblom.
— *See* Virtanen, Ekblom, and Laurila.
Elam, J. S. *See* Cancalon and Elam.
Elbein, A. *See* Ratner, Elbein, Bunge, Porter, Bunge, and Glaser.
Eldredge, D., *See* Baumann and Eldredge.
Eldridge, C. F., Bunge, M. B., Bunge, R. P., and Wood, P. M. Differentiation of axon-related Schwann cells in vitro. I. Ascorbic acid regulates basal lamina assembly and myelin formation. 105:1023.
— *See* Carey, Eldridge, Cornbrooks, Timpl, and Bunge.
Elgin, S. C. R. *See* Christensen, LeStourgeon, Jamrich, Howard, Serunian, Silver, and Elgin.
— *See* Hill, Mott, Burnett, Abmayr, Lowenhaupt, and Elgin.
— *See* Howard, Abmayr, Shinefeld, Sato, and Elgin.
— *See* Steiner, Eissenberg, and Elgin.
Elhammer, Å., and Kornfeld, S. Two enzymes involved in the synthesis of O-linked oligosaccharides are localized on membranes of different densities in mouse lymphoma BW5147 cells. 99:327.
Eliceiri, G. L. *See* Gurney, and Eliceiri.
Eliopoulos, E. *See* Bowles, Marcus, Pappin, Findlay, Eliopoulos, Maycox, and Burgess.
Ellinger, A. *See* Pavelka and Ellinger.
Ellingsworth, L. R. *See* Flanders, Thompson, Cissel, Van Obberghen-Schilling, Baker, Kass, Ellingsworth, Roberts, and Sporn.
— *See* Heine, Munoz, Flanders, Ellingsworth, Lam, Thompson, Roberts, and Sporn.
— *See* Thompson, Flanders, Smith, Ellingsworth, Roberts, and Sporn.
Ellis, L., Wallis, I., Abreu, E., and Pfenninger, K. H. Nerve growth cones isolated from fetal rat brain. IV. Preparation of a membrane subfraction and identification of a membrane glycoprotein expressed on sprouting neurons. 101:1977.
— *See* Wallis, Ellis, Suh, and Pfenninger.
Ellisman, M. H., Miller, J. A., and Agnew, W. S. Molecular morphology of the tetrodotoxin-binding sodium channel protein from *Electrophorus electricus* in solubilized and reconstituted preparations. 97:1834.
—, **and Porter, K. R.** Microtrabecular structure of the axoplasmic matrix: Visualization of cross-linking structures and their distribution. 87:464.
— *See* Abramson, Ellisman, Deerinck, Maulet, Gentry, Doctor, and Taylor.
— *See* Hammerschlag, Stone, Bolen, Lindsey, and Ellisman.
— *See* Wiley, and Ellisman.
Elmer, L. W. *See* Angelides, Elmer, Loftus, and Elson.
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Elson, E. *See* Angelides, Elmer, Loftus, and Elson.
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— *See* Cooper, Loftus, Frieden, Bryan, and Elson.
— *See* Dubinsky, Loftus, Fischbach, and Elson.
— *See* Liu, Young, and Elson.
— *See* Pasternak and Elson.
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Emling, F. *See* Takasaki, Emling, and Leive.
Emr, S. *See* Schauer, Emr, Gross, and Schekman.
Emr, S. D., Hall, M. N., and Silhavy, T. J. A mechanism of protein localization: the signal hypothesis and bacteria. 86:701.
—, **and Silhavy, T. J.** Molecular components of the signal sequence that function in the initiation of protein export. 95:689.
—, **Vassarotti, A., Garrett, J., Geller, B. L., Takeda, M., and Douglas, M. G.** The amino terminus of the yeast F_1-ATPase β-subunit precursor functions as a mitochondrial import signal. 102:523.
— *See* Bankaitis, Malehorn, Emr, and Greene.
— *See* Banta, Robinson, Klionsky, and Emr.
Enberg, G. *See* Mattsson, Enberg, Ruusala, Hall, and Påhlman.
End, D. *See* Huff, End, and Guroff.
Enders, G. C., Henson, J. H., and Millette, C. F. Sertoli cell binding to isolated testicular basement membrane. 103:1109.
Enders, G. H. *See* Hornick, Hamilton, Spaziani, Enders, and Havel.
Endo, T., and Masaki, T. Differential expression and distribution of chicken skeletal- and smooth-muscle-type α-actinins during myogenesis in culture. 99:2332.
— *See* Taubman, Smith, Izumo, Grant, Endo, Andreadis, and Nadal-Ginard.
Enenstein, J., and Furcht, L. T. Isolation and characterization of epinectin, a novel adhesion protein for epithelial cells. 99:464.
Eng, L. *See* Hatfield, Skoff, Maisel, and Eng.
Engel, J. *See* Ertl, Mengele, Wenzl, Engel, and Sumper.
— *See* Schittny, Timpl, and Engel.
Engel, W. K. *See* Martinuzzi, Askanas, Kobayashi, Engel, and Di Mauro.
Englander, L. L., and Rubin, L. L. Acetylcholine receptor clustering and nuclear movement in muscle fibers in culture. 104:87.
Engleman, W. *See* Villiger, Kelley, Engleman, Kuhn, and McDonald.
English, L. H., Macara, I. C., and Cantley, L. G. Vanadium stimulates the (Na^+,K^+) pump in Friend erythroleukemia cells and blocks erythropoiesis. 97:1299.
Englund, P. T. *See* Bangs, Andrews, Hart, and Englund.
Engvall, E., Davis, G. E., Dickerson, K., Ruoslahti, E., Varon, S., and Manthorpe, M. Mapping of domains in human laminin using monoclonal antibodies: localization of the neurite-promoting site. 103:2457.
—, **Hessle, H., and Klier, G.** Molecular assembly, secretion, and matrix deposition of type VI collagen. 102:703.
— *See* Bruns, Press, Engvall, Timpl, and Gross.
— *See* Hayman, Engvall, A'Hearn, Barnes, Pierschbacher, and Ruoslahti.
— *See* Hayman, Engvall, and Ruoslahti.
— *See* Ill, Engvall, and Ruoslahti.
— *See* Keene, Engvall, and Glanville.
— *See* Languino, Gehlsen, Wayner, Carter, Engvall, and Ruoslahti.
— *See* Leivo and Engvall.
— *See* Manthorpe, Engvall, Ruoslahti, Longo, Davis, and Varon.
— *See* Muir, Engvall, Varon, and Manthorpe.
— *See* Sakai, Keene, and Engvall.
Ennis, P. D. *See* Unwin and Ennis.
Enns, C. A., Larrick, J. W., Suomalainen, H., Schroder, J., and Sussman, H. H. Co-migration and internalization of transferrin and its receptor on K562 cells. 97:579.

Entwistle, A., Curtis, D. H., and Zalin, R. J. Myoblast fusion is regulated by a prostanoid of the one series independently of a rise in cyclic AMP. 103:857.
—, **Zalin, R. J., Bevan, S., and Warner, A. E.** The control of chick myoblast fusion by ion channels operated by prostaglandins and acetylcholine. 106:1693.
—, **Zalin, R. J., Warner, A. E., and Bevan, S.** A role for acetylcholine receptors in the fusion of chick myoblasts. 106:1703.
Epel, D. *See* Clapper, Davis, Lamothe, Patton, and Epel.
— *See* Johnson and Epel.
— *See* Swezey and Epel.
— *See* Zimmerberg, Sardet, and Epel.
Eppenberger, H. M., Perriard, J.-C., Rosenberg, U. B., and Strehler, E. E. The M_r 165,000 M-protein myomesin: a specific protein of cross-striated muscle cells. 89:185.
— *See* Grove, Cerny, Perriard, and Eppenberger.
— *See* Grove, Kurer, Lehner, Doetschman, Perriard, and Eppenberger.
— *See* Lehner, Stick, Eppenberger, and Nigg.
— *See* Strehler, Pelloni, Heizmann, and Eppenberger.
— *See* Wallimann, Doetschman, and Eppenberger.
— *See* Wallimann, Walzthöny, Wegmann, Moser, Eppenberger, and Barrantes.
Eppenberger, U. *See* Novak-Hofer, Küng, and Eppenberger.
Eppler, C. M., Bayley, H., Greenberg, S. M., and Schwartz, J. H. Structural studies on a family of cAMP-binding proteins in the nervous system of *Aplysia*. 102:320.
Epstein, H. F., Berliner, G. C., Casey, D. L., and Ortiz, I. Purified thick filaments from the nematode *Caenorhabditis elegans*: evidence for multiple proteins associated with core structures. 106:1985.
—, **Miller, D. M., III, Ortiz, I., and Berliner, G. C.** Myosin and paramyosin are organized about a newly identified core structure. 100:904.
—, **Ortiz, I., and Mackinnon, L. A. T.** The alteration of myosin isoform compartmentation in specific mutants of *Caenorhabditis elegans*. 103:985.
— *See* Ardizzi and Epstein.
Epstein, L. M., Mahon, K. A., and Gall, J. G. Transcription of a satellite DNA in the newt. 103:1137.
Epstein, N. *See* Aikawa, Miller, Rabbege, and Epstein.
Erämaa, M. *See* Wasenius, Saraste, Salvén, Eramaa, Holm, and Lehto.
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Erckson, H. P. *See* Milan and Erckson.
Erdei, A. *See* Fesus, Falus, Erdei, and Laki.
Erdos, G. W., and Whitaker, D. Failure to detect immunocytochemically reactive endogenous lectin on the cell surface of *Dictyostelium discoideum*. 97:993.
Erecinska, M. *See* Vanderkooi, Maniara, and Erecinska.
Erickson, C. A., and Nuccitelli, R. Embryonic fibroblast motility and orientation can be influenced by physiological electric fields. 98:296.
Erickson, H. P., Carrell, N., and McDonagh, J. Fibronectin molecule visualized in electron microscopy: a long, thin, flexible strand. 91:673.
—, **and Taylor, H. C.** Hexabrachion proteins in embryonic chicken tissues and human tumors. 105:1387.
— *See* Alliegro, Ettensohn, Burdsal, Erickson, and McClay.
— *See* Lightner, Gumkowski, Bigner, and Erickson.
— *See* Lotz, Burdsal, Erickson, and McClay.
— *See* Ohmori, Fretto, Harrison, Switzer, Erickson, and McKee.
— *See* Walker, O'Brien, Pryer, Soboeiro, Voter, Erickson, and Salmon.
Erikson, E. *See* Erikson, Purchio, Erikson, Collett, and Brugge.
Erikson, R. L., Purchio, A. F., Erikson, E., Collett, M. S., and Brugge, J. S. Molecular events in cells transformed by Rous sarcoma virus. 87:319.
— *See* Martin-Perez, Bar-Zvi, Branton, and Erikson.
— *See* Martins, Sugimoto, and Erikson.
— *See* Resh and Erikson.
Ernst, L. A. *See* DeBiasio, Bright, Ernst, Waggoner, and Taylor.
Ernst, S. A., Dodson, W. C., and Karnaky, K. J., Jr. Structural diversity of occluding junctions in the low-resistance chloride-secreting opercular epithelium of seawater-adapted killifish (*Fundulus heteroclitus*). 87:488.
—, **and Schreiber, J. H.** Ultrastructural localization in Na^+,K^+-ATPase in rat and rabbit kidney medulla. 91:803.
— *See* Hootman, and Ernst.
Ertl, H., Mengele, R., Wenzl, S., Engel, J., and Sumper, M. The extracellular matrix of *Volvox carteri*: molecular structure of the cellular compartment. 109:3493.
Erwin, G. *See* Waugh and Erwin.
Esch, F. *See* Schubert, LaCorbiere, and Esch.
Eshelman, J. R. *See* Lin, Eshelman, Forry-Schaudies, Duran, Lessard, and Holtzer.
Eshleman, J. *See* Lin, Eshleman, Grund, Fischman, Masaki, Franke, and Holtzer.
Eskenasy, M. *See* Ghinea, Fixman, Alexandru, Popov, Hasu, Ghitescu, Eskenasy, Simionescu, and Simionescu.
Esko, J. D. *See* LeBaron, Esko, Woods, Johansson, and Höök.
Eskridge, E. M., and Shields, D. The NH_2 terminus of preproinsulin directs the translocation and glycosylation of a bacterial cytoplasmic protein by mammalian microsomal membranes. 103:2263.
Eskue, W. A. *See* Buchanan, Imam, Eskue, and Snell.
— *See* Snell, Eskue, and Buchanan.
Estes, K., Monfalcone, L. L., Hammes, S. R., Holowka, D., and Baird, B. Membrane-bound IgE receptor complexes fused with rat basophilic leukemia cells mediate degranulation. 105:747.
Etcheverry, T. *See* Holcomb, Hansen, Etcheverry, and Scheckman.
Etlinger, J. D. *See* Silver and Etlinger.
Eto, S. *See* Matsuura, Eto, Kato, and Tashiro.
Ettensohn, C. A. *See* Alliegro, Ettensohn, Burdsal, Erickson, and McClay.
Etzler, C. A. *See* McKeown-Longo and Etzler.
Eusebi, F., Molinaro, M., and Zani, B. M. Agents that activate protein kinase C reduce acetylcholine sensitivity in cultured myotubes. 100:1339.
Euteneuer, U., Jackson W. T., and McIntosh, J. R. Polarity of spindle microtubules in *Haemanthus* endosperm. 94:644.
—, **and McIntosh, J. R.** Polarity of midbody and phragmoplast microtubules. 87:509.
—, **and McIntosh, J. R.** Structural polarity of kinetochore microtubules in PtK_1 cells. 89:338.
—, **Ris, H., and Borisy, G. G.** Polarity of kinetochore microtubules in Chinese hamster ovary cells after recovery from a colcemid block. 97:202.
—, **and Schliwa, M.** Evidence for an involvement of actin in the positioning and motility of centrosomes. 101:96.
— *See* McIntosh and Euteneuer.
— *See* Schliwa, Nakamura, Porter, and Euteneuer.
Evans, D. M. *See* Carey and Evans.
Evans, E., and Leung, A. Adhesivity and rigidity of erythrocyte membrane in relation to wheat germ agglutinin binding. 98:1201.
Evans, L., Mitchison, T., and Kirschner, M. Influence of the centrosome on the structure of nucleated microtubules. 100:1185.
Evans, R. M. Phosphorylation of vimentin in mitotically selected cells. In vitro cyclic AMP-independent kinase and calcium-stimulated phosphatase activities. 108:67.
Evans, W. H. *See* Zervos, Hope, and Evans.
Eveloff, J., Haase, W., and Kinne, R. Separation of renal medullary cells: Isolation of cells from the thick ascending limb of Henle's loop. 87:672.
Everitt, E. A. *See* Sage, Vernon, Funk, Everitt, and Angello.
Evinger-Hodges, M. J., Ewton, D. Z., Seifert, S. C., and Florini, J. R. Inhibition of myoblast differentiation in vitro by a protein isolated from liver cell medium. 93:395.
Ewenstein, B. M., Warhol, M. J., Handin, R. I., and Pober, J. S. Composition of the von Willebrand factor storage organelle (Weibel-Palade body) isolated from cultured human umbilical vein endothelial cells. 104:1423.
Ewton, D. Z. *See* Evinger-Hodges, Ewton, Seifert, and Florini.

F

Facci, L., Skaper, S. D., Favaron, M., and Leon, A. A role for gangliosides in astroglial cell differentiation in vitro. 106:821.
Fagerberg, K. *See* McGookey, Fagerberg, and Anderson.
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— *See* Yamamoto and Fahimi.
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Faiman, L. E. *See* Kaufman, Foster, Haye, and Faiman.
Fairbairn, S., Gilbert, R., Ojakian, G., Schwimmer, R., and Quigley, J. P. The extracellular matrix of normal chick embryo fibroblasts: its effect on transformed chick fibroblasts and its proteolytic degradation by the transformants. 101:1790.
Fairbanks, G. *See* Patel and Fairbanks.
— *See* Wolf, Hagopian, Lewis, Voglmayr, and Fairbanks.
Faissner, A. *See* Kücherer, Faissner, and Schachner.
Fakan, S., Leser, G., and Martin, T. E. Immunoelectron microscope visualization of heterogeneous nuclear ribonucleoproteins and small nuclear riboproteins within spread transcription complexes. 103:1153.
—, **Leser, G., and Martin, T. E.** Ultrastructural distribution of nuclear ribonucleoproteins as visualized by immunocytochemistry on thin sections. 98:358.

Falco, N. *See* Mooseker, Graves, Wharton, Falco, and Howe.
Falcone, D. J., Mateo, N., Shio, H., Minick, C. R., and Fowler, S. D. Lipoprotein heparin-fibronectin-denatured collagen complexes enhance cholesterolyl ester accumulation in macrophages. 99:1266.
— *See* McCaffrey, Falcone, Brayton, Agarwal, Welt, and Weksler.
Falconer, M. M. *See* Seagull, Falconer, and Weerdenburg.
Falkenthal, S. *See* Chun and Falkenthal.
Falkner, F. G., Saumweber, H., and Biessmann, H. Two *Drosophila melanogaster* proteins related to intermediate filament proteins of vertebrate cells. 91:175.
Falkow, S. *See* Finlay, Gumbiner, and Falkow.
Fällman, M. *See* Särndahl, Lindroth, Bengtsson, Fällman, Gutavsson, Stendahl, and Andersson.
Fallon, J. R. Preferential outgrowth of central nervous system neurites on astrocytes and Schwann cells as compared with nonglial cells in vitro. 100:198.
—, and Gelfman, C. E. Agrin-related molecules are concentrated at acetylcholine receptor clusters in normal and aneural developing muscle. 108:1527.
—, and Nachmias, V. T. Localization of cytoplasmic and skeletal myosins in developing muscle cells by double-label immunofluorescence. 87:237.
— *See* Nitkin, Smith, Magill, Fallon, Yao, Wallace, and McMahan.
Fallon, J. T. *See* Ouellette, Greco, James, Frederick, Naftilan, and Fallon.
Fallon, R. F., and Goodenough, D. A. Five-hour half-life of mouse liver gap-junction protein. 90:521.
Falmagne, P. *See* Lambotte, Falmagne, Capiau, Zamen, Ruysschaert, and Dirkx.
Falus, A. *See* Fesus, Falus, Erdei, and Laki.
Fambrough, D. M., Taleyasu, K., Lippincott-Schwartz, J., and Siegel, N. R. Structure of LEP100, a glycoprotein that shuttles between lysosomes and the plasma membrane, deduced from the nucleotide sequence of the encoding cDNA. 106:61.
— *See* Anderson and Fambrough.
— *See* Bayne, Anderson, and Fambrough.
— *See* Chiquet and Fambrough.
— *See* Gardner and Fambrough.
— *See* Lippincott-Schwartz and Fambrough.
— *See* Pumplin and Fambrough.
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Fangman, W. L. *See* Rivin and Fangman.
Farach, H. A., Jr. *See* Roe, Farach, Strittmatter, and Lennarz.
Farach-Carson, M. C., Carson, D. D., Collier, J. L., Lennarz, W. J., Park, H. R., and Wright, G. C. A calcium-binding, asparagine-linked oligosaccharide is involved in skeleton formation in the sea urchin embryo. 109:1289.
Farber, C. *See* Nathan, Srimal, Farber, Sanchez, Kabbash, Asch, Gailit, and Wright.
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— *See* Brown, Constantinescu, and Farquhar.
— *See* Brown, Goodhouse, and Farquhar.
— *See* Courtoy, Kanwar, Hynes, and Farquhar.
— *See* Kanwar, Hascall, and Farquhar.
— *See* Kanwar, Linker, and Farquhar.
— *See* Kerjaschki, Noronha-Blob, Sacktor, and Farquhar.
— *See* Kerjaschki, Sharkey, and Farquhar.
— *See* Merisko, Farquhar, and Palade.
— *See* Reeves, Kanwar, and Farquhar.
— *See* Rodman, Kerjaschki, Merisko, and Farquhar.
— *See* Rodman, Seidman, and Farquhar.
— *See* Salpeter and Farquhar.
— *See* Saraste, Palade, and Farquhar.
— *See* Stow and Farquhar.
— *See* Stow, Kjéllen, Unger, Höök, and Farquhar.
— *See* Woods, Doriaux, and Farquhar.
Farrell, K. W., Jordan, M. A., Miller, H. P., and Wilson, L. Phase dynamics at microtubule ends: the coexistence of microtubule length changes and treadmilling. 104:1035.
Farris, J. *See* Feige, Bradley, Fryburg, Farris, Cousens, Barr, and Baird.
Fath, K. R., and Lasek, R. J. Two classes of actin microfilaments are associated with the inner cytoskeleton of axons. 107:613.
Fattoum, A. *See* Yin, Albrecht, and Fattoum.
Fauci, A. S. *See* Azzarone, Suarez, Mingari, Moretta, and Fauci.
Faust, J. R. *See* Liscum, Ruggiero, and Faust.
Faust, P. L., Chirgwin, J. M., and Kornfeld, S. Renin, a secretory glycoprotein, acquires phosphomannosyl residues. 105:1947.
—, Wall, D. A., Perara, E., Lingappa, V. R., and Kornfeld, S. Expression of human cathepsin D in *Xenopus* oocytes: phosphorylation and intracellular targeting. 105:1937.
Favaron, M. *See* Facci, Skaper, Favaron, and Leon.
Fawcett, D. W. *See* Swan, Linck, Ito, and Fawcett.
Fay, F. S., Fujiwara, K., Rees, D. D., and Fogarty, K. E. Distribution of α-actinin in single isolated smooth muscle cells. 96:783.
— *See* Kargacin, Cooke, Abramson, and Fay.
Fay, R. B. *See* Bessen, Fay, and Witman.
Fayet, G., Hovsépian, S., Dickson, J. G., and Lissitzky, S. Reorganization of porcine thyroid cells into functional follicles in a chemically defined, serum- and thyrotropin-free medium. 93:479.
Fazel, A. *See* Paiement, Jolicoeur, Fazel, and Bergeron.
Fearon, D. T. *See* Hafeman, Smith, Fearon, and McConnell.
Featherstone, C., Darby, M. K., and Gerace, L. A monoclonal antibody against the nuclear pore complex inhibits nucleocytoplasmic transport of protein and RNA in vivo. 107:1289.
—, Griffiths, G., and Warren, G. Newly synthesized G protein of vesicular stomatitis virus is not transported to the Golgi complex in mitotic cells. 101:2036.
— *See* Warren, Featherstone, Griffiths, and Burke.
Fechheimer, M. The *Dictyostelium discoideum* 30,000-dalton protein is an actin filament–bundling protein that is selectively present in filopodia. 104:1539.
—, and Cebra, J. J. Phosphorylation of lymphocyte myosin catalyzed in vitro and in intact cells. 93:261.
— *See* Brier, Fechheimer, Swanson, and Taylor.
— *See* Furukawa, Wampler, and Fechheimer.
Fedarko, N. S., and Conrad, H. E. A unique heparan sulfate in the nuclei of hepatocytes: structural changes with the growth state of the cells. 102:587.
Federici, A. B. *See* Dejana, Lampugnani, Giorgi, Gaboli, Federici, Ruggeri, and Marchisio.
Feghali, R., and Leinwand, L. A. Molecular genetic characterization of a developmentally regulated human perinatal myosin heavy chain. 108:1791.
— *See* Kiehart and Feghali.
Feher, G. *See* Valkirs and Feher.
Fehlmann, M., Carpentier, J-L., Le Cam, A., Thamm, P., Saunders, D., Brandenburg, D., Orci, L., and Freychet, P. Biochemical and morphological evidence that the insulin receptor is internalized with insulin in hepatocytes. 93:82.
— *See* Carpentier, Gazzano, van Obberghen, Fehlmann, Freychet, and Orci.
Fehon, R. G. *See* Johansen, Fehon, and Artavanis-Tsakonas.
Fei, Y. *See* Rivera, Pasion, Wong, Fei, and Biswas.
Feibig, M. L. *See* Oliver, Seagrave, Pfeiffer, Feibig, and Deanin.
Feig, L. A., Klagsbrun, M., and Bellvé, A. R. Mitogenic polypeptide of the mammalian seminiferous epithelium: biochemical characterization and partial purification. 97:1435.
Feige, A. J.-J., Bradley, J. D., Fryburg, K., Farris, J., Cousens, L. D., Barr, P. J., and Baird, A. Differential effects of heparin, fibronectin, and laminin on the phosphorylation of basic fibroblast growth factor by protein kinase C and the catalytic subunit of protein kinase A. 109:3105.
Fein, A. *See* Payne and Fein.
— *See* Turner, Jaffe, and Fein.
Feinberg, J. *See* Pariset, Feinberg, Dacheux, Øyen, Jahmsen, and Weinman.
Feinstein, M. B. *See* Sha'afi, Shefcyk, Yassin, Molski, Volpi, Naccache, White, Feinstein, and Becker.
— *See* Yassin, Shefcyk, White, Tao, Volpi, Molski, Naccache, Feinstein, and Sha'afi.
Feinstein, S. C. *See* Drubin, Feinstein, Shooter, and Kirschner.
Felder, S. *See* Livneh, Benveniste, Prywes, Felder, Kam, and Schlessinger.
Feldherr, C. M., Cohen, R. J., and Ogburn, J. A. Evidence for mediated protein uptake by amphibian oocyte nuclei. 96:1486.
—, Kallenbach, E., and Schultz, N. Movement of a karyophilic protein through the nuclear pores of oocytes. 99:2216.
—, and Ogburn, J. A. Mechanism for the selection of nuclear polypeptides in *Xenopus* oocytes. II. Two-dimensional gel analysis. 87:589.
— *See* Dworetzky and Feldherr.
— *See* Dworetzky, Lanford, and Feldherr.
Feldman, J. D. *See* Woda, Yguerabide, and Feldman.
Feldman, M. *See* Chou, Mano, and Feldman.
Feldmann, G. *See* Poliard, Bernuau, Tournier, Legrès, Schoevaert, Feldmann, and Sala-Trepat.
Fellous, A. *See* Luduena, Fellous, Francon, Nunez, and McManus.
Felsenfeld, G. *See* Lieber, Hesse, Nickol, and Felsenfeld.
Feltkamp, C. A. *See* Roos, Spiele, Feltkamp, Huisman, Wiegant, Traas, and Mesland.

Feltz, A. *See* Thuret-Carnahan, Bossu, Feltz, Langley, and Aunis.
Fennick, B. J. *See* Kronenberg, Fennick, and Vasicek.
Fenselau, A. *See* Glaser, D'Amore, Michels, Patz, and Fenselau.
Fentie, I. *See* Lindemann, Fentie, and Rikmenspoel.
Fenton, J. W., II *See* Bar-Shavit, Kahn, Fenton, and Wilner.
Fenton, W. A. *See* Horwich, Fenton, Firgaira, Fox, Kolansky, Mellman, and Rosenberg.
— *See* Horwich, Kalousek, Fenton, Furtak, Pollock, and Rosenberg.
Fenwick, R. G. *See* LeBlanc, Földvári, Spencer, Breckenridge, Fenwick, Williams, and Mezei.
Feracci, H. M. *See* Bartles, Feracci, Stieger, and Hubbard.
Feramisco, J. R., and Blose, S. H. Distribution of fluorescently labeled α-actinin in living and fixed fibroblasts. 86:608.
— *See* Bar-Sagi, Suhan, McCormick, and Feramisco.
— *See* Blose, Meltzer, and Feramisco.
— *See* Keith, Feramisco, and Shelanski.
— *See* Lamb, Fernandez, Conti, Adelstein, Glass, Welch, and Feramisco.
— *See* Lamb, Fernandez, Feramisco, and Welch.
Ferguson, D. G., Franzini-Armstrong, C., and Schwartz, H. W., III. Subunit structure of junctional feet in triads of skeletal muscle: a freeze-drying, rotary-shadowing study. 99:1735.
—, **Young, E. F., Raeymaekers, L., and Kranias, E. G.** Localization of phospholamban in smooth muscle using immunogold electron microscopy. 107:555.
Ferguson, J. E. *See* Busa, Ferguson, Joseph, Williamson, and Nuccitelli.
Ferguson, M. *See* Lee, Ferguson, and Bo Chen.
Ferguson, M. A. J. *See* Duszenko, Ivanov, Ferguson, Plesken, and Cross.
Fernandez, A. *See* Lamb, Fernandez, Conti, Adelstein, Glass, Welch, and Feramisco.
— *See* Lamb, Fernandez, Feramisco, and Welch.
Fernández, E. *See* Kindle, Schnell, Fernández, and Lefebvre.
Ferns, S. *See* Warburton, Ormerod, Monaghan, Ferns, and Rudland.
Ferracini, R. *See* Tarone, Ferracini, Galetto, and Comoglio.
Ferrari, N. *See* Pfeffer, Ferrari, Tosetti, and Vidali.
Ferrell, J. E., Jr., and Huestis, W. H. Phosphoinositide metabolism and the morphology of human erythrocytes. 98:1992.
Ferris, A. L., Brown, J. C., Park, R. D., and Storrie, B. Chinese hamster ovary cell lysosomes rapidly exchange contents. 105:2703.
Ferro-Novick, S., Hansen, W., Schauer, I., and Schekman, R. Genes required for completion of import of proteins into the endoplasmic reticulum in yeast. 98:44.
—, **Novick, P., Field, C., and Schekman, R.** Yeast secretory mutants that block the formation of active cell surface enzymes. 98:35.
— *See* Bacon, Salminen, Ruohola, Novick, and Ferro-Novick.
— *See* Newman and Ferro-Novick.
— *See* Ruohola, Kabcenell, and Ferro-Novick.
Fesce, R. *See* Haimann, Torri-Tarelli, Fesce, and Ceccarelli.
— *See* Torri-Tarelli, Grohovaz, Fesce, and Ceccarelli.
— *See* Valtorta, Jahn, Fesce, Greengard, and Ceccarelli.
Fessler, J. H. *See* Blumberg, Fessler, Kurkinen, and Fessler.
— *See* Fessler, Campbell, Duncan, and Fessler.
Fessler, L. I., Campbell, A. G., Duncan, K. G., and Fessler, J. H. Drosophila laminin: characterization and localization. 105:2383.
— *See* Blumberg, Fessler, Kurkinen, and Fessler.
Festoff, B. W., Hantaï, D., Soria, J., Thomaïdis, A., and Soria, C. Plasminogen activator in mammalian skeletal muscle: characteristics of effect of denervation on urokinase-like and tissue activator. 103:1415.
Fesus, L., Falus, A., Erdei, A., and Laki., K. Human β_2-microglobulin is a substrate of tissue transglutaminase: polymerization in solution and on the cell surface. 89:706.
Feuer, B. I. *See* Miller, Feuer, Vanderoef, and Lenard.
Feuerstein, N., Spiegel, S., and Mond, J. J. The nuclear matrix protein, numatrin (B23), is associated with growth factor–induced mitogenesis in Swiss 3T3 fibroblasts and with T lymphocyte proliferation stimulated by lectins and anti–T cell antigen receptor antibody. 107:1629.
Fewtrell, C. *See* Mohr and Fewtrell.
Fey, E. G., Krochmalnic, G., and Penman, S. The nonchromatin substructures of the nucleus: the ribonucleoprotein (RNP)-containing and RNP-depleted matrices analyzed by sequential fractionation and resinless section electron microscopy. 102:1654.
—, **Wan, K. M., and Penman, S.** Epithelial cytoskeletal framework and nuclear matrix-intermediate filament scaffold: three-dimensional organization and protein composition. 98:1973.
Fey, S. J. *See* Bravo, Fey, Larsen, Coppard, and Celis.
— *See* Celis, Larsen, Fey, and Celis.
ffrench-Constant, C., Miller, R. H., Kruse, J., Schachner, M., and Raff, M. C. Molecular specialization of astrocyte processes at nodes of Ranvier in rat optic nerve. 102:844.
—, **Van De Water, L., Dvorak, H. F., and Hynes, R. O.** Reappearance of an embryonic pattern of fibronectin splicing during wound healing in the adult rat. 109:903.
Field, C., and Schekman, R. Localized secretion of acid phosphatase reflects the pattern of cell-surface growth in *Saccharomyces cerevisiae*. 86:123.
— *See* Ferro-Novick, Novick, Field, and Schekman.
Field, C. M. *See* Kellogg, Field, and Alberts.
— *See* Miller, Field, and Alberts.
Fielding, C. J. *See* Fielding, Davison, Karasek, and Fielding.
Fielding, P. E., Davison, P. M., Karasek, M. A., and Fielding, C. J. Regulation of sterol transport in human microvascular endothelial cells. 94:350.
Fields, A. P., and Shaper, J. H. A major 62-kD intranuclear matrix polypeptide is a component of metaphase chromosomes. 107:833.
Fields, B. N. *See* Weltzin, Lucia-Jandris, Michetti, Fields, Kraehenbuhl, and Neutra.
Fields, K. L. *See* Schubart and Fields.
— *See* Yen and Fields.
Fife, R. S., Caterson, B., and Myers, S. L. Identification of link proteins in canine synovial cell cultures and canine articular cartilage. 100:1050.
Fifková, E., and Delay, R. J. Cytoplasmic actin in neuronal processes as a possible mediator of synaptic plasticity. 95:345.
Fighetti, M. *See* Rubino, Fighetti, Unger, and Cappuccinelli.
Filion, M. *See* Laliberté, Dagenais, Filion, Bibor-Hardy, Simard, and Royal.
Filliatreau, G. *See* Denoulet, Filliatreau, de Nechaud, Gros, and Di Giamberardino.
Filmer, D. *See* Achler, Filmer, Merte, and Dreckhahn.
Finch, J. T. *See* Sorger, Crowther, Finch, and Pearse.
Findlay, J. B. C. *See* Bowles, Marcus, Pappin, Findlay, Eliopoulos, Maycox, and Burgess.
Findly, R. C., and Gall, J. G. Organization of ribosomal genes in *Paramecium tetraurelia*. 84:547.
—, **and Pederson, T.** Regulated transcription of the genes for actin and heat-shock proteins in cultured *Drosophila* cells. 88:323.
Fine, L. G. *See* Chuman, Fine, Cohen, and Saier.
Fine, R. E. *See* Benson, Porter-Jordan, Buoniconti, and Fine.
— *See* Lekmansky, Hasilik, von Figura, Helmy, Fishman, Fine, Kedersha, and Rome.
— *See* Pitch, Shia, Benson, and Fine.
— *See* Rothman, Bursztyn-Pettegrew, and Fine.
— *See* Rubenstein, Fine, Luskey, and Rothman.
Fineman, R. M. *See* Ash, Fineman, Kalka, Morgan, and Wire.
Fini, M. E., Bendena, W. G., and Pardue, M. L. Unusual behavior of the cytoplasmic transcript of *hsrω*: an abundant, stress-inducible RNA that is translated but yields no detectable protein product. 108:2045.
Finidori, J., Rizzolo, L., Gonzalez, A., Kreibich, G., Adesnik, M., and Sabatini, D. D. The influenza hemagglutin insertion signal is not cleaved and does not halt translocation when presented to the endoplasmic reticulum as part of a translocating polypeptide. 104:1705.
— *See* Arpin, Pringault, Finidori, Garcia, Jeltsch, Vandekerckhove, and Louvard.
— *See* Rizzolo, Finidori, Gonzalez, Arpin, Ivanov, Adesnik, and Sabatini.
Fink, B. *See* Galvin, Vance, Dixit, Fink, and Frazier.
Fink, D. J., and Gainer, H. Axonal transport of proteins. A new view using in vivo covalent labeling. 85:175.
Finkelstein, A. *See* Akabas, Cohen, and Finkelstein.
— *See* Cohen, Akabas, Zimmerberg, and Finkelstein.
— *See* Kachadorian, Muller, and Finkelstein.
Finlay, B. B., Gumbiner, B., and Falkow, S. Penetration of *Salmonella* through a polarized Madin–Darby canine kidney epithelial cell monolayer. 107:221.
Finlay, D. R., Newmeyer, D. D., Price, T. M., and Forbes, D. J. Inhibition of in vitro nuclear transport by a lectin that binds to nuclear pores. 104:189.
— *See* Newmeyer, Finlay, and Forbes.
Finley-Whelan, J. *See* Clinton and Finley-Whelan.
Finne, J., Burger, M. M., and Prieels, J.-P. Enzymatic basis for a lectin-resistant phenotype: increase in a fucosyltransferase in mouse melanoma cells. 92:277.
— *See* He, Finne, and Goridis.
Firestone, G. L., John, N. L., and Yamamoto, K. R. Glucocorticoid-regulated glycoprotein maturation in wild-type and mutant rat cell lines. 103:2323.
— *See* Haffar, Aponte, Bravo, John, Hess, and Firestone.
Firestone, R. A. *See* Miller, Griffiths, Lenard, and Firestone.
— *See* Wilson, Firestone, and Lenard.
Firgaira, F. A. *See* Horwich, Fenton, Firgaira, Fox, Kolansky, Mellman, and Rosenberg.
Firtel, R. A. *See* Gomer, Datta, and Firtel.
Fischbach, G. D. *See* Bursztajn and Fischbach.

— *See* Carr, Fischbach, and Cohen.
— *See* Dubinsky, Loftus, Fischbach, and Elson.
— *See* Role and Fischbach.
— *See* Role, Roufa, and Fischbach.
— *See* Usdin and Fischbach.
Fischer, G. *See* Künemund, Jungalwala, Fischer, Chou, Keilhauer, and Schachner.
Fischer, H. D., Natowicz, M., Sly, W. S., and Bretthauer, R. K. Fibroblast receptor for lysosomal enzymes mediates pinocytosis of multivalent phosphomannan fragment. 84:77.
Fischer, P. A. *See* Gruenbaum, Landesman, Drees, Bare, Saumweber, Paddy, Sedat, Smith, Benton, and Fisher.
Fischer-Colbrie, R. *See* Patzak, Böck, Fischer-Colbrie, Schauenstein, Schmidt, Lingg, and Winkler.
Fischman, D. A. *See* Bader, Masaki, and Fischman.
— *See* Bouché, Gondfine, and Fischman.
— *See* Danto and Fischman.
— *See* Dennis, Shimizu, Reinach, and Fischman.
— *See* Ip, Danto, and Fischman.
— *See* Lin, Eshleman, Grund, Fischman, Masaki, Franke, and Holtzer.
— *See* Lin, Holtzer, Schultheiss, Murray, Masaki, Fischman, and Holtzer.
— *See* Reinach, Masaki, and Fischman.
— *See* Reinach, Masaki, Shafiq, Obinata, and Fischman.
— *See* Shimizu, Dennis, Masaki, and Fischman.
Fish, W. R. *See* Grab, Webster, Ito, Fish, Verjee, and Lonsdale-Eccles.
Fisher, C., Jones, A., and Roop, D. R. Abnormal expression and processing of keratins in pupoid fetus (pf/pf) and repeated epilation (Er/Er) mutant mice. 105:1807.
Fisher, G. W. *See* DeBiasio, Wang, Fisher, and Lansing Taylor.
— *See* Bright, Fisher, Rogowska, and Taylor.
Fisher, K. A. Monolayer freeze-fracture autoradiography: quantitative analysis of the transmembrane distribution of radioiodinated concanavalin. A. 93:155.
— Spectroscopic assays for measuring quantities of erythrocyte membrane "halves." 92:44.
—, **and Yanagimoto, K. C.** Effect of membrane splitting on transmembrane polypeptides. 102:551.
Fisher, L. W. *See* Gehron Robey, Young, Fisher, and McClain.
— *See* Whitson, Harrison, Dunlap, Bowers, Fisher, Robey, and Termine.
Fisher, M. M. *See* Schiff, Fisher, Jones, and Underdown.
— *See* Schiff, Fisher, and Underdown.
Fisher, P. A., Berrios, M., and Blobel, G. Isolation and characterization of a proteinaceous subnuclear fraction composed of nuclear matrix, peripheral lamina, and nuclear pore complexes from embryos of *Drosophila melanogaster*. 92:674.
— *See* Berrios and Fisher.
— *See* McConnell, Whalen, Smith, and Fisher.
— *See* Smith and Fisher.
— *See* Smith, Gruenbaum, Berrios, and Fisher.
Fisher, P. R., Merkl, R., and Gerisch, G. Quantitative analysis of cell motility and chemotaxis in *Dictyostelium discoideum* by using an image processing system and a novel chemotaxis chamber providing stationary chemical gradients. 108:973.
— *See* Segall, Fisher, and Gerisch.
Fisher, S. J., Cui, T.-y., Zhang, L., Hartman, L., Grahl, K., Guo-Yang, Z., Tarpey, J., and Damsky, C. H. Adhesive and degradative properties of human placental cytotrophoblast cells in vitro. 109:891.
Fisher, S. K. *See* Bernstein, Breding, and Fisher.
— *See* Vaughan, Fisher, Bernstein, Hale, Linberg, and Matsumoto.
Fishkind, D. *See* Pearl, Fishkind, Mooseker, Keene, and Keller.
Fishkind, D. J. *See* Henson, Begg, Beaulieu, Fishkind, Bonder, Terasaki, Lebeche, and Kaminer.
Fishman, J. *See* Lemansky, Hasilik, von Figura, Helmy, Fishman, Fine, Kedersha, and Rome.
Fishman, M. C. *See* Sonderegger, Fishman, Bokoum, Bauer, Neale, and Nelson.
Fishman, P. H. Internalization and degradation of cholera toxin by cultured cells: relationship to toxin action. 93:860.
— *See* Critchley, Nelson, Habig, and Fishman.
— *See* Spiegel, Kassis, Wilchek, and Fishman.
— *See* Spiegel, Schlessinger, and Fishman.
— *See* Spiegel, Yamada, Hom, Moss, and Fishman.
Fitch, J. M., Gibney, E., Sanderson, R. D., Mayne, R., and Linsenmayer, T. F. Domain and basement membrane specificity of a monoclonal antibody against chicken Type IV collagen. 95:641.
—, **Mayne, R., and Linsenmayer, T. F.** Developmental acquisition of basement membrane heterogeneity: type IV collagen in the avian lens capsule. 97:940.
— *See* Birk, Fitch, Babiarz, and Linsenmayer.
— *See* Linsenmayer, Fitch, Schmid, Zak, Gibney, Sanderson, and Mayne.
— *See* Linsenmayer, Gibney, Fitch, Gross, and Mayne.
— *See* Linsenmayer, Gibney, and Fitch.
— *See* Mayne, Wiedemann, Irwin, Sanderson, Fitch, Linsenmayer, and Kühn.
— *See* Sanderson, Fitch, Linsenmayer, and Mayne.
FitzGerald, P. G., Bok, D., and Horowitz, J. Immunocytochemical localization of the main intrinsic polypeptide (MIP) in ultrathin frozen sections of rat lens. 97:1491.
Fitzsimons, R. B. *See* Narusawa, Fitzsimons, Izumo, Nadal-Ginard, Rubinstein, and Kelly.
Fixman, A. *See* Ghinea, Fixman, Alexandru, Popov, Hasu, Ghitescu, Eskenasy, Simionescu, and Simionescu.
— *See* Ghitescu and Fixman.
— *See* Ghitescu, Fixman, Simionescu, and Simionescu.
Flanagan, S. D., Yost, B., and Crawford, G. Putative 51,000 M_r protein marker for postsynaptic densities is virtually absent in cerebellum. 94:743.
Flanders, K. C., Thompson, N. L., Cissel, D. S, Van Obberghen-Schilling, E., Baker, C. C., Kass, M. E., Ellingsworth, L. R., Roberts, A. B., and Sporn, M. B. Transforming growth factor-β1: histochemical localization with antibodies to different epitopes. 108:653.
— *See* Carrington, Roberts, Flanders, Roche, and Reddi.
— *See* Czaja, Weiner, Flanders, Giambrone, Wind, Biempica, and Zern.
— *See* Gehron Robey, Young, Flanders, Roche, Kondaiah, Reddi, Termine, Sporn, and Roberts.
— *See* Heine, Munoz, Flanders, Ellingsworth, Lam, Thompson, Roberts, and Sporn.
— *See* Thompson, Flanders, Smith, Ellingsworth, Roberts, and Sporn.
Flavin, M. *See* Nath, Flavin, and Schiffmann.
— *See* Nath, Flavin, and Gallin.
Flegg, L. *See* Warn, Flegg, and Warn.
Fleischer, B. Orientation of glycoprotein galactosyltransferase and sialytransferase enzymes in vesicles derived from rat liver Golgi apparatus, 89:246.
Fleischer, S. *See* Costello, Chadwick, Saito, Chu, Maurer, and Fleischer.
— *See* Mitchell, Palade, and Fleischer.
— *See* Mitchell, Saito, Palade, and Fleischer.
— *See* Saito, Inui, Radermacher, Frank, and Fleischer.
— *See* Saito, Seiler, Chu, and Fleischer.
Fleming, T. P., McConnell, J., Johnson, M. H., and Stevenson, B. R. Development of tight junctions de novo in the mouse early embryo: control of assembly of the tight junction–specific protein, ZO-1. 108:1407.
Fletcher, D. J., Quigley, J. P., Bauer, G. E., and Noe, B. D. Characterization of proinsulin- and proglucagon-converting activities in isolated islet secretory granules. 90:312.
Fletcher, J. R. *See* Heidemann, Joshi, Shechter, Fletcher, and Bothwell.
Fletcher, W. H., and Byus, C. V. Direct cytochemical localization of catalytic subunits dissociated from cAMP-dependent protein kinase in Reuber H-35 hepatoma cells. I. Development and validation of fluoresceinated inhibitor. 93:719.
— *See* Byus and Fletcher.
— *See* Murray and Fletcher.
Flicker, P. F., Peltz, G., Sheetz, M. P., Parham, P., and Spudich, J. A. Site-specific inhibition of myosin-mediated motility in vitro by monoclonal antibodies. 100:1024.
— *See* Milligan and Flicker.
— *See* Pasternak, Flicker, Ravid, and Spudich.
Fliesler, S. J., Rayborn, M. E., and Hollyfield, J. G. Membrane morphogenesis in retinal rod outer segments: inhibition by tunicamycin. 100:574.
Flint, A. *See* Johnson, Inoué, Flint, and Hastings.
Flint, M. H. *See* Gibson, Beaumont, and Flint.
— *See* Gibson and Flint.
Flint, N. *See* Haeuptle, Flint, Gough, and Dobberstein.
— *See* Lipp, Flint, Hacuptle, and Dobberstein.
Floor, E. *See* Buckley, Floor, and Kelly.
Florine, D. L. *See* Scott, Hoerl, Wille, Florine, Krawisz, and Yun.
Florini, J. R. *See* Evinger-Hodges, Ewton, Seifert, and Florini.
Florkiewicz, R. Z., Smith, A., Bergmann, J. E., and Rose, J. K. Isolation of stable mouse cell lines that express cell surface and secreted forms of the vesicular stomatitis virus glycoprotein. 97:1381.
Flucher, B. E., Lenglachner-Bachinger, C., Pohlhammer, K., Adam, H., and Mollay, C. Skin peptides in *Xenopus laevis*: morphological requirements for precursor processing in developing and regenerating granular skin glands. 103:2299.
Fluss, S. R. *See* Yamashiro, Fluss, and Maxfield.
Flynn, G. *See* Joly, Flynn, and Purich.

Fodor, E. *See* Morimoto and Fodor.
Foe, V. E., and Alberts, B. M. Reversible chromosome condensation induced in *Drosophila* embryos by anoxin: visualization of interphase nuclear organization. 100:1623.
Fogarty, K. E. *See* Fay, Fujiwara, Rees, and Fogarty.
Foidart, J.-M. *See* Madri, Roll, Furthmayr, and Foidart.
Foisner, R., Leichtfried, F. E., Herrmann, H., Small, J. V., Lawson, D., and Wiche, G. Cytoskeleton-associated plectin: in situ localization, in vitro reconstitution, and binding to immobilized intermediate filament proteins. 106:723.
Fok, A. K. *See* Allen and Fok.
— *See* Allen, Schroeder, and Fok.
Földvári, M. *See* LeBlanc, Földvári, Spencer, Breckenridge, Fenwick, Williams, and Mezei.
Foley, M., MacGregor, A. N., Kusel, J. R., Garland, P. B., Downie, T., and Moore, I. The lateral diffusion of lipid probes in the surface membrane of *Schistosoma mansoni*. 103:807.
Foley, S. F. *See* Cohen, and Foley.
Folkman, J. *See* Doctrow and Folkman.
— *See* Ingber and Folkman.
Fong, S.-L. *See* Gonzalez-Fernandez, Landers, Glazebrook, Fong, Liou, Lam, and Bridges.
Fontaine, B., Klarsfeld, A., and Changeux, J.-P. Calcitonin gene-related peptide and muscle activity regulate acetylcholine receptor α-subunit mRNA levels by distinct intracellular pathways. 105:1337.
—, **and Changeux, J.-P.** Localization of nicotinic acetylcholine receptor α-subunit transcripts during myogenesis and motor endplate development in the chick. 108:1025.
Forbes, D. J., Kornberg, T. B., and Kirschner, M. W. Small nuclear RNA transcription and ribonucleoprotein assembly in early *Xenopus* development. 97:62.
— *See* Finlay, Newmeyer, Price, and Forbes.
— *See* Newmeyer, Finlay, and Forbes.
Fordham, M. *See* White, Amos, and Fordham.
Forestner, D. M. *See* Horst, Forestner, and Besharse.
Forman, D. S. *See* Shain, Forman, Madelian, and Turner.
Fornieri, C., Baccarani-Contri, M., Quaglino, D., Jr., and Pasquali-Ronchetti, I. Lysyl oxidase activity and elastin/glycosaminoglycan interactions in growing chick and rat aortas. 105:1463.
Forrester, J. V. *See* Curtis, Forrester, McInnes, and Lawrie.
— *See* Wilkinson, Lackie, Forrester, and Dunn.
Forry-Schaudies, S. *See* Antin, Forry-Schaudies, Friedman, Tapscott, and Holtzer.
— *See* Lin, Eshelman, Forry-Schaudies, Duran, Lessard, and Holtzer.
Forsberg, E. *See* Hedlin, Bottger, Forsberg, Johansson, and Thyberg.
Forscher, P., and Smith, S. J. Actions of cytochalasins on the organization of actin filaments and microtubules in a neuronal growth cone. 107:1505.
Forsum, U. *See* Ocklind, Forsum, and Öbrink.
Forte, M. *See* Haga, Forte, Saimi, and Kung.
Fosket, D. E. *See* Morejohn and Fosket.
Fossa, P. *See* Descalzi Cancedda, Manduca, Tacchetti, Fossa, Quarto, and Cancedda.
Foster, C. S. *See* Fujikawa, Foster, Gipson, and Colvin.
Foster, G. A. *See* Brenneman, Neale, Foster, d'Autremont, and Westbrook.
Foster, K. A. *See* Collins and Foster.
Foster, R. F. *See* Kaufman, Foster, Haye, and Faiman.
Foster, S. A. *See* Gabel and Foster.
Fougere-Deschatrette, C., Schimke, R. T., Weil, D., and Weiss, M. C. A study of chromosomal changes associated with amplified dihydrofolate reductase genes in rat hepatoma cells and their dedifferentiated variants. 99:497.
Fowler, A. *See* Bernabeu, Tobin, Fowler, Zabin, and Lake.
Fowler, S. *See* Fujiki, Fowler, Shio, Hubbard, and Lazarow.
— *See* Fujiki, Hubbard, Fowler, and Lazarow.
Fowler, S. D. *See* Falcone, Mateo, Shio, Minick, and Fowler.
— *See* Greenspan, Mayer, and Fowler.
Fowler, V., and Taylor, D. L. Spectrin plus band 4.1 cross-link actin. Regulation by micromolar calcium. 85:361.
Fowler, V. M., Davis, J. Q., and Bennett, V. Human erythrocyte myosin: identification and purification. 100:47.
—, **Luna, E. J., Hargreaves, W. R., Taylor, D. L., and Branton, D.** Spectrin promotes the association of F-actin with the cytoplasmic surface of the human erythrocyte membrane. 88:388.
— *See* Luna, Fowler, Swanson, Branton, and Taylor.
Fowler, W. E., and Aebi, U. A consistent picture of the actin filament related to the orientation of the actin molecule. 97:264.
—, **and Aebi, U.** Polymorphism of actin paracrystals induced by polylysine. 93:452.
— *See* Aebi, Fowler, Isenberg, Pollard, and Smith.
— *See* Aebi, Fowler, Rew, and Sun.
Fox, J. E. *See* Horwich, Fenton, Firgaira, Fox, Kolansky, Mellman, and Rosenberg.
Fox, J. E. B., Boyles, J. K., Berndt, M. C., Steffen, P. K., and Anderson, L. K. Identification of a membrane skeleton in platelets. 106:1525.
—, **Boyles, J. K., Reynolds, C. C., and Phillips, D. R.** Actin filament content and organization in unstimulated platelets. 98:1985.
— *See* Boyles, Fox, Phillips, and Stenberg.
Fox, L. A., and Sale, W. S. Direction of force generated by the inner row of dynein arms on flagellarmicrotubules. 105:1781.
— *See* Sale and Fox.
Fox, L. M. *See* O'Morchoe, Jones, Jarosz, O'Morchoe, and Fox.
Frado, L. L. *See* Di Padua Mathieu, Mura, Frado, Woodcock, and Stollar.
Frado, L.-L. Y., and Craig, R. Structural changes induced in Ca^{2+}-regulated myosin filaments by Ca^{2+} and ATP. 109:529.
— *See* Woodcock, Frado, and Rattner.
Frail, D. E. *See* Musil, Frail, and Merlie.
Francis, G. R., and Waterston, R. H. Muscle organization in *Caenorhabditis elegans*: localization of proteins implicated in thin filament attachment and I-band organization. 101:1532.
Francon, J. *See* Luduena, Fellous, Francon, Nunez, and McManus.
Frangia, J. *See* Tennekoon, Frangia, Aitchison, and Price.
Frank, J. *See* Saito, Inui, Radermacher, Frank, and Fleischer.
Frank, R. *See* Rathjen, Wolff, Frank, Bonhoeffer, and Rutishauser.
— *See* Tooze, Hollinshead, Frank, and Burke.
Franke, W., Schmid, E., Freudenstein, C., Appelhans, B., Osborn, M., Weber, K., and Keenan, T. W. Intermediate-size filaments of the prekeratin type in myoepithelial cells. 84:633.
Franke, W. W., Grund, C., and Achtstätter, T. Co-expression of cytokeratins and neurofilament proteins in a permanent cell line: cultured rat PC12 cells combine neuronal and epithelial features. 103:1933.
—, **Heid, H. W., Grund, C., Winter, S., Freudenstein, C., Schmid, E., Jarasch, E.-D., and Keenan, T. W.** Antibodies to the major insoluble milk fat globule membrane-associated protein: specific location in apical regions of lactating epithelial cells. 89:485.
—, **Kleinschmidt, J. A., Spring, H., Krohne, G., Grund, C., Trendelenburg, M. F., Stoehr, M., and Scheer, U.** A nucleolar skeleton of protein filaments demonstrated in amplified nucleoli of *Xenopus laevis*. 90:289.
—, **Schmid, E., Vandekerckhove, J., and Weber, K.** A permanently proliferating rat vascular smooth muscle cell with maintained expression of smooth muscle characteristics, including actin of the vascular smooth muscle type. 87:594.
—, **Schmid, E., Wellsteed, J., Grund, C., Gigi, O., and Geiger, B.** Change of cytokeratin filament organization during the cell cycle: selective masking of an immunologic determinant in interphase PtK_2 cells. 97:1255.
—, **Winter, S., Grund, C., Schmid, E., Schiller, D. L., and Jarasch, E. D.** Isolation and characterization of desmosome-associated tonafilaments from rat intestinal brush border. 90:116.
— *See* Ankenbauer, Kleinschmidt, Vandekerckhove, and Franke.
— *See* Bosch, Leube, Achtstätter, Moll, and Franke.
— *See* Boyer, Tucker, Vallés, Franke, and Thiery.
— *See* Cowin, Kapprell, and Franke.
— *See* Dabauvalle and Franke.
— *See* Duden and Franke.
— *See* Hügle, Hazan, Scheer, and Franke.
— *See* Hatzfeld and Franke.
— *See* Kapprell, Owaribe, and Franke.
— *See* Kartenbeck, Schwechheimer, Moll, and Franke.
— *See* Kleinschmidt, Scheer, Dabauvalle, Bustin, and Franke.
— *See* Knapp, Franke, Heid, Hatzfeld, Jorcano, and Moll.
— *See* Krohne, Stick, Kleinschmidt, Moll, Franke, and Hausen.
— *See* Leube, Bader, Bosch, Zimbelmann, Achtstaetter, and Franke.
— *See* Lin, Eshleman, Grund, Fischman, Masaki, Franke, and Holtzer.
— *See* Longo, Krohne, and Franke.
— *See* Moll, Franke, Volc-Platzer, and Krepler.
— *See* Olins, Olins, Zentgraf, and Franke.
— *See* Regauer, Franke, and Virtanen.
— *See* Rungger-Brändle, Achtstätter, and Franke.
— *See* Scheer, Lanfranchi, Rose, Franke, and Ringertz.
— *See* Schmid, Schiller, Grund, Stadler, and Franke.
— *See* Schnitzer, Franke, and Schachner.
— *See* Volberg, Geiger, Kartenbeck, and Franke.
— *See* Zentgraf and Franke.
Frankfurter, A. *See* Binder, Frankfurter, and Rebhun.
Franki, N. *See* Hays, Bourguet, Satir, Franki, and Rapoport.
— *See* Rapoport, Kachadorian, Muller, Franki, and Hays.
Frankl, P. *See* DeRosier, Tilney, Bonder, and Frankl.

Fransen, J. *See* Schweizer, Fransen, Bächi, Ginsel, and Hauri.
Fransen, J. A. *See* Gorr, Stieger, Fransen, Kedinger, Marxer, and Hauri.
Fransen, J. A. M. *See* Hauri, Sterchi, Bienz, Fransen, and Marxer.
Frantz, C. N., Nathan, D. G., and Scher, C. D. Intracellular univalent cations and the regulation of the BALB/c-3T3 cell cycle. 88:51.
Franz, H. *See* Drenckhahn and Franz.
Franzi, A. T. *See* De Luca, D'Anna, Bondanza, Franzi, and Cancedda.
Franzini-Armstrong, C., Kenney, L. J., and Varriano-Marston, E. The structure of calsequestrin in triads of vertebrate skeletal muscle: a deep-etch study. 105:49.
— *See* Bard, Franzini-Armstrong, and Ip.
— *See* Block and Franzini-Armstrong.
— *See* Block, Imagawa, Campbell, and Franzini-Armstrong.
— *See* Castellani, Hardwicke, and Franzini-Armstrong.
— *See* Ferguson, Franzini-Armstrong, and Schwartz.
Fraser, S. E. *See* Stollberg and Fraser.
Frazer, K. A. *See* Hall, Frazer, Hann, and Reichardt.
Frazier, B. A. *See* Hennessy, Frazier, Kim, Deckwerth, Baumgartel, Rotwein, and Frazier.
Frazier, W. A. Thombospondin: a modular adhesive glycoprotein of platelets and nucleated cells. 105:625.
— *See* Galvin, Dixit, O'Rourke, Santoro, Grant, and Frazier.
— *See* Galvin, Stockhausen, Meyers-Hutchins, and Frazier.
— *See* Galvin, Vance, Dixit, Fink, and Frazier.
— *See* Hennessy, Frazier, Kim, Deckwerth, Baumgartel, Rotwein, and Frazier.
— *See* Jamieson, Frazier, and Schlesinger.
Freaney, D. E. *See* Plow, Freaney, Plescia, and Miles.
Frederick, D. *See* Oueliette, Greco, James, Frederick, Naftilan, and Fallon.
Fredericks, W. J. *See* Tank, Fredericks, Barak, and Webb.
Free, S. J. *See* Lenhard, Siegel, and Free.
Freed, J. H. *See* Wade, Freed, and Edidin.
Freedberg, I. M. *See* Gilmartin, Mitchell, Vidrich, and Freedberg.
Freedman, S. D., and Jamieson, J. D. Hormone-induced protein phosphorylation. I. The relationship between secretagogue action and endogenous protein phosphorylation in intact cells from the exocrine pancreas and parotid. 95:903.
—, **and Jamieson, J. D.** Hormone-induced protein phosphorylation. II. Localization to the ribosomal fraction from rat exocrine pancreas and parotid of a 29,000-dalton protein phosphorylated *in situ* in response to secretagogues. 95:909.
—, **and Jamieson, J. D.** Hormone-induced protein phosphorylation. III. Regulation of the phosphorylation of the secretagogue-responsive 29,000-dalton protein by both Ca^{++} and cAMP in vitro. 95:918.
— *See* Gorelick, Cohn, Freedman, Delahunt, Gershoni, and Jamieson.
Freeman, C. J. *See* Lew, Hockaday, Freeman, and Bookchin.
Freeman, K. B. *See* Liu, Bell, Freeman, and Shore.
Freemont, A. J. *See* Kwan, Dickson, Freemont, and Grant.
Freeze, H. H. *See* Ebert, Freeze, Richardson, Dimond, and Cardelli.
Freitag, C. *See* Ball, Freitag, and Gurofsky.
Frelinger, A. L., III, and Rutishauser, U. Topography of N-CAM structural and functional determinants. II. Placement of monoclonal antibody epitopes. 103:1729.
— *See* Watanabe, Frelinger, and Rutishauser.
French, C. *See* Ayme-Southgate, Lasko, French, and Pardue.
French, P. W., and Hewish, D. R. Localization of low-sulfur keratin proteins in the wool follicle using monoclonal antibodies. 102:1412.
Freter, R. R., and Schultz, R. M. Regulation of murine oocyte meiosis: evidence for a gonadotropin-induced, cAMP-dependent reduction in a maturation inhibitor. 98:1118.
Fretto, L. J. *See* Ohmori, Fretto, Harrison, Switzer, Erickson, and McKee.
Freudenstein, C. *See* Franke, Heid, Grund, Winter, Freudenstein, Schmid, Jarasch, and Keenan.
— *See* Franke, Schmid, Freudenstein, Appelhans, Osborn, Weber, and Keenan.
Frey, A. B. *See* Colman, Kreibich, Frey, and Sabatini.
— *See* De Lemos-Chiarandini, Frey, Sabatini, and Kreibich.
Freychet, P. *See* Carpentier, Gazzano, van Obberghen, Fehlmann, Freychet, and Orci.
— *See* Fehlmann, Carpentier, Le Cam, Thamm, Saunders, Brandenburg, Orci, and Freychet.
Freytag, W. *See* Zampighi, Kyte, and Freytag.
Frid, M. G. *See* Glukhova, Frid, Shekhonin, Vasilevskaya, Grunwald, Saginati, and Koteliansky.
Fridovich, S. E. *See* Schwartz, Bolognesi, and Fridovich.
Frieden, C. *See* Cooper, Bryan, Schwab, Frieden, Loftus, and Elson.
— *See* Cooper, Loftus, Frieden, Bryan, and Elson.
— *See* Cortese and Frieden.
Friederich, E., Fritz, H.-J., and Huttner, W. B. Inhibition of tyrosine sulfaction in the *trans*-Golgi retards the transport of a constitutively secreted protein to the cell surface. 107:1655.
Friedlander, D. R., Brackenbury, R., and Edelman, G. M. Conversion of embryonic form to adult forms of N-CAM in vitro results from *de novo* synthesis of adult forms. 101:412.
—, **Brackenbury, R., and Edelman, G. M.** Correction. 101:1629.
—, **Grumet, M., and Edelman, G. M.** Nerve growth factor enhances expression of neuron–glia cell adhesion molecule in PC12 cells. 102:413.
—, **Hoffman, S., and Edelman, G. M.** Functional mapping of cytotactin: proteolytic fragments active in cell-substrate adhesion. 107:2329.
— *See* Hoffman, Friedlander, Chuong, Grumet, and Edelman.
Friedlander, M. *See* Hertzberg, Anderson, Friedlander, and Gilula.
Friedman, M. J., Blankenberg, T., Sensabaugh, G., and Tenforde, T. S. Recognition and invasion of human erythrocytes by malarial parasites: contribution of sialoglycoproteins to attachment and host specificity. 98:1672.
Friedman, N. *See* Chaney, Sundaram, Friedman, and Stanley.
Friedman, R. L. *See* Durkin, Chakravarti, Bartos, Liu, Friedman, and Chung.
Friedman, R. S. *See* Hoffstein, Friedman, and Weissmann.
Friedman, T. M. *See* Antin, Forry-Schaudies, Friedman, Tapscott, and Holtzer.
Friedrich, V. L. *See* Godfraind, Friedrich, Holmes, and Dubois-Dalcq.
Friedrich, V. L., Jr. *See* Hudson, Friedrich, Behar, Dubois-Dalcq, and Lazzarini.
Friend, D. S. Plasma-membrane diversity in a highly polarized cell. 93:243.
— *See* Bearer and Friend.
Frier, C. *See* Natowicz, Hallett, Frier, Chi, Schlesinger, and Baenziger.
Fries, E., and Rothman, J. E. Transient activity of Golgi-like membranes as donors of vesicular stomatitis viral glycoprotein in vitro. 90:697.
— *See* Helenius, Kartenbeck, Simons, and Fries.
— *See* Persson, Ahlström, and Fries.
— *See* Rothman and Fries.
Friesel, R., Komoriya, A., and Maciag, T. Inhibition of endothelial cell proliferation by gamma-interferon. 104:689.
— *See* Schreiber, Kenney, Kowalski, Thomas, Gimenez-Gallego, Rios-Candelore, Di Salvo, Barritault, Courty, Courtois, Moenner, Loret, Burgess, Mehlman, Friesel, Johnson, and Maciag.
— *See* Terranova, DiFlorio, Lyall, Hic, Friesel, and Maciag.
Friis, R. R. *See* Reichmann, Ball, Groner, and Friis.
Frisch, S. M. *See* Aggeler, Frisch, and Werb.
Fristrom, D. *See* Doctor, Fristrom, and Fristrom.
— *See* Wolfgang, Fristrom, and Fristrom.
Fristrom, D. K. Septate junctions in imaginal disks of *Drosophila*: a model for the redistribution of septa during cell rearrangement. 94:77.
Fristrom, J. W. *See* Doctor, Fristrom, and Fristrom.
— *See* Wolfgang, Fristrom, and Fristrom.
Fritsch, P. *See* Schuler, Hintner, Wolff, Fritsch, and Stingl.
Fritz, H.-J. *See* Friederich, Fritz, and Huttner.
Fritz, I. B. *See* Skinner, Tung, and Fritz.
Fritze, L. M. S., Reilly, C. F., and Rosenberg, R. D. An antiproliferative heparan sulfate species produced by postconfluent smooth muscle cells. 100:1041.
Frixione, E. Firm structural associations between migratory pigment granules and microtubules in crayfish retinula cells. 96:1258.
Froehner, S. C. Peripheral proteins of postsynaptic membranes from *Torpedo* electric organ identified with monoclonal antibodies. 99:88.
—, **Murnane, A. A., Tobler, M., Peng, H. B., and Sealock, R.** A postsynaptic M_r 58,000 (58K) protein concentrated at acetylcholine receptor-rich sites in *Torpedo* electroplaques and skeletal muscle. 104:1633.
— *See* Bloch and Froehner.
— *See* Hyman and Froehner.
— *See* LaRochelle, Wray, Sealock, and Froehner.
— *See* Peng and Froehner.
— *See* St. John, Froehner, Goodenough, and Cohen.
— *See* Sealock, Wray, and Froehner.
Frösch, D. *See* Kaufmann, Frösch, Westphal, Weber, and Klein.
Froshauer, S. Kartenbeck, J., and Helenius, A. Alphavirus RNA replicase is located on the cytoplasmic surface of endosomes and lysosomes. 107:2075.
Frost, G. H., Thompson, W. C., and Carney, D. H. Monoclonal antibody to the thrombin receptor stimulates DNA synthesis in combination with gamma-thrombin or phorbal myristate acetate. 105:2551.
Fry, D. M., and Morales, M. F. A reexamination of the effects of creatine on muscle protein synthesis in tissue culture. 84:294.
Fryburg, K. *See* Feige, Bradley, Fryburg, Farris, Cousens, Barr, and Baird.
Fryer, P. R. *See* King, Tabiowo, and Fryer.
— *See* Ratcliffe, Fryer, and Hardingham.
Fuad, N. *See* Day, Ryrie, and Fuad.
Fuchs, E. *See* Albers and Fuchs.
— *See* Coulombe, Kopan, and Fuchs.

— *See* Glass and Fuchs.
— *See* Glass, Kim, and Fuchs.
— *See* Kim, Marchuk, and Fuchs.
— *See* Kim, Stellmach, Javors, and Fuchs.
— *See* Kopan and Fuchs.
— *See* Kopan, Traska, and Fuchs.
— *See* Stoler, Kopan, Duvic, and Fuchs.
— *See* Tyner and Fuchs.
Fuchs, J.-P. *See* Mähl, Lutz, Puvion, and Fuchs.
Fuchs, R. *See* Roff, Fuchs, Mellman, and Robbins.
— *See* Schmid, Fuchs, Kielian, Helenius, and Mellman.
Fuge, H. *See* Steffen, Fuge, Dietz, Bastmeyer, and Müller.
Fujii, D. K. *See* Lander, Fujii, Gospodarowicz, and Reichardt.
— *See* Lander, Fujii, and Reichardt.
Fujii, H. *See* Cunha, Fujii, Neubauer, Shannon, Sawyer, and Reese.
Fujikawa, L. S., Foster, C. S, Gipson, I. K., and Colvin, R. B. Basement membrane components in healing rabbit corneal epithelial wounds: immunofluorescence and ultrastructural studies. 98:128.
Fujiki, Y., Fowler, S., Shio, H., Hubbard, A. L., and Lazarow, P. B. Polypeptide and phospholipid composition of the membrane of liver peroxisomes: comparison with endoplasmic reticulum and mitochondrial membrane. 93:103.
—, **Hubbard, A. L., Fowler, S., and Lazarow, P. B.** Isolation of intracellular membranes by means of sodium carbonate treatment: application to endoplasmic reticulum. 93:97.
— *See* Alexson, Fujiki, Shio, and Lazarow.
— *See* Rachubinski, Fujiki, Mortensen, and Lazarow.
Fujimoto, T., and Singer, S. J. Immunocytochemical studies of endothelial cells in vivo. I. The presence of desmin only, or of desmin plus vimentin, or vimentin only, in the endothelial cells of different capillaries of the adult chicken. 103:2775.
Fujita, M. *See* Spray, Fujita, Saez, Choi, Watanabe, Hertzberg, Rosenberg, and Reid.
Fujiwake, H. *See* Allen, Weiss, Hayden, Brown, Fujiwake, and Simpson.
Fujiwara, K. *See* Fyers and Fujiwara.
— *See* Fay, Fujiwara, Rees, and Fogarty.
— *See* Hirokawa, Tilney, Fujiwara, and Heuser.
— *See* Larson, Fujiwara, Alexander, and Gimbrone.
— *See* McBeath and Fujiwara.
— *See* Terasaki, Chen, and Fujiwara.
— *See* White and Fujiwara.
— *See* White, Gimbrone, and Fujiwara.
Fuks, Z. *See* Rogelj, Klagsbrun, Atzmon, Kurokawa, Haimovitz, Fuks, and Vlodavsky.
Fukui, Y. Formation of multinuclear cells induced by dimethyl sulfoxide: inhibition of cytokinesis and occurrence of novel nuclear division in *Dictyostelium* cells. 86:181.
—, **and Katsumaru, H.** Dynamics of nuclear actin bundle induction by dimethyl sulfoxide and factors affecting its development. 84:131.
— *See* Tilney, Fukui, and DeRosier.
— *See* Yumura and Fukui.
— *See* Yumura, Mori, and Fukui.
Fuller, B. B. *See* Shimizu, Shimizu, and Fuller.
Fuller, G. M., Otto, J. M., Woloski, B. M., McGary, C. T., and Adams, M. A. The effects of hepatocyte stimulating factor on fibrinogen biosynthesis in hepatocyte monolayers. 101:1481.
— *See* Otto, Grenett, and Fuller.
Fuller, M. T., Caulton, J. H., Hutchens, J. A., Kaufman, T. C., and Raff, E. C. Genetic analysis of microtubule structure: a β-tubulin mutation causes the formation of aberrant microtubules in vivo and in vitro. 104:385.
—, **Caulton, J. H., Hutchens, J. A., Kaufman, T. C., and Raff, E. C.** Mutations that encode partially functional β2 tubulin subunits have different effects on structurally different microtubule arrays. 107:141.
— *See* Piperno and Fuller.
Fuller, S. D., and Simons, K. Transferrin receptor polarity and recycling accuracy in "tight" and "leaky" strains of Madin–Darby canine kidney cells. 103:1767.
— *See* Griffiths, Fuller, Back, Hollinshead, Pfeiffer, and Simons.
— *See* Pfeiffer, Fuller, and Simons.
— *See* Tooze, Kern, Fuller, and Howell.
— *See* Tooze, Tooze, and Fuller.
Fulton, A. B., Prives, J., Farmer, S. R., and Penman, S. Developmental reorganization of the skeletal framework and its surface lamina in fusing muscle cells. 91:103.
— *See* Isaacs, Kim, Struve, and Fulton.
— *See* Prives, Fulton, Penman, Daniels, and Christian.
Fulton, C., Cheng, K.-L., and Lai, E. Y. Two calmodulins in *Naegleria* flagellates: characterization, intracellular segregation, and programmed regulation of mRNA abundance during differentiation. 102:1671.
—, **and Walsh, C.** Cell differentiation and flagellar elongation in *Naegleria gruberi*. Dependence on transcription and translation. 85:346.
— *See* Lai, Remillard, and Fulton.
Fumagalli, G., and Zanini, A. In cow anterior pituitary, growth hormone and prolactin can be packaged in separate granules of the same cell. 100:2019.
— *See* de Curtis, Fumagalli, and Borgese.
— *See* Hashimoto, Fumagalli, Zanini, and Meldolesi.
— *See* Rosa, Fumagalli, Zanini, and Huttner.
Funa, K. *See* Terracio, Rönnstrand, Tingström, Rubin, Claesson-Welsh, Funa, and Heldin.
Funatsu, K. *See* Phillips. Oda, Yousef, and Funatsu.
Funatsu, T. *See* Ishiwata and Funatsu.
Funderburg, F. M., and Markwald, R. R. Conditioning of native substrates by chondroitin sulfate proteoglycans during cardiac mesenchymal cell migration. 103:2475.
Funderud, S. *See* Haugli, Andreassen, and Funderud.
Funk, S. *See* Kapoor, Sakai, Funk, Roux, Bornstein, and Sage.
Funk, S. E. *See* Sage, Vernon, Funk, Everitt, and Angello.
Furcht, L. T. *See* Charonis, Skubitz, Koliakos, Reger, Dege, Vogel, Wohlhueter, and Furcht.
— *See* Donaldson, Mahan, Hasty, McCarthy, and Furcht.
— *See* Enenstein and Furcht.
— *See* Herbst, McCarthy, Tsilibary, and Furcht.
— *See* McCarthy and Furcht.
— *See* McCarthy, Hagen, and Furcht.
— *See* McCarthy, Palm, and Furcht.
— *See* Palm and Furcht.
— *See* Rogers, Letourneau, Peterson, Furcht, and McCarthy.
Furie, M. B., Cramer, E. B., Naprstek, B. L., and Silverstein, S. C. Cultured endothelial cell monolayers that restrict the transendothelial passage of macromolecules and electrical current. 98:1033.
— *See* Lombardi, Montesano, Furie, Silverstein, and Orci.
Furlan, A. *See* Damiani, Margreth, Furlan, Dahms, Arnn, and Sabbadini.
Furlong, S. T. *See* Golan, Brown, Cianci, Furlong, and Caulfield.
Furmanski, P. *See* Yang, Kirkland, Jorgensen, and Furmanski.
Furst, D. O. *See* Small, Furst, and De Mey.
Fürst, D. O., Osborn, M., Nave, R., and Weber, K. The organization of titin filaments in the half-sarcomere revealed by monoclonal antibodies in immunoelectron microscopy: a map of ten nonrepetitive epitopes starting at the Z line extends close to the M line. 106:1563.
—, **Osborn, M., and Weber, K.** Myogenesis in the mouse embryo: differential onset of expression of myogenic proteins and the involvement of titin in myofibril assembly. 109:517.
— *See* Nave, Fürst, and Weber.
Furtak, K. *See* Horwich, Kalousek, Fenton, Furtak, Pollock, and Rosenberg.
Furth, M. E. *See* Swanson, Elste, Greenberg, Schwartz, Aldrich, and Furth.
Furthmayr, H. *See* Charonis, Tsilibary, Saku, and Furthmayr.
— *See* Charonis, Tsilibary, Yurcheno, and Furthmayr.
— *See* Madri, Roll, Furthmayr, and Foidart.
— *See* Roll, Madri, Albert, and Furthmayr.
Furukawa, R., Wampler, J. E., and Fechheimer, M. Measurement of the cytoplasmic pH of *Dictyostelium discoideum* using a low light level microspectrofluorometer. 107:2541.
Furuya, M. *See* Uyeda and Furuya.
Fusco, P. J. *See* Bergmann and Fusco.
Fusenig, N. E. *See* Boukamp, Petrussevska, Breitkreutz, Hornung, Markham, and Fusenig.
Fussle, R., Bhakdi, S., Sziegoleit, A., Tranum-Jensen, J., Kranz, T., Wellensiek, H. J. On the mechanism of membrane damage by *Staphylococcus aureus* α-toxin. 91:83.
Futrelle, R. P., Traut, J., and McKee, W. G. Cell behavior in *Dictyostelium discoideum*: preaggregation response to localized cyclic AMP pulses. 92:807.

G

Gaarde, W. *See* Painter, Prodouz, and Gaarde.
Gabbiani, G. *See* Clowes, Clowes, Kocher, Ropraz, Chaponnier, and Gabbiani.
— *See* Hoessli, Rungger-Brändle, Jockusch, and Gabbiani.
— *See* Skalli, Ropraz, Trzeciak, Benzonana, Gillessen, and Gabbiani.
Gabel, C. A., and Bergmann, J. E. Processing of the asparagine-linked oligosaccharides of secreted and intracellular forms of the vesicular stomatitis virus G protein: in vivo evidence of Golgi apparatus compartmentalization. 101:460.
—, **and Foster, S. A.** Lysosomal enzyme trafficking in mannose 6-phosphate

receptor-positive mouse L-cells: demonstration of a steady-state accumulation of phosphorylated acid hydrolases. 102:943.
—, **and Foster, S. A.** Mannose 6-phosphate receptor-mediated endocytosis of acid hydrolases: internalization of β-glucuronidase is accompanied by a limited dephosphorylation. 103:1817.
—, **and Foster, S. A.** Postendocytic maturation of acid hydrolases: evidence of prelysosomal processing. 105:1561.
—, **Goldberg, D. E., and Kornfeld, S.** Lysosomal enzyme oligosaccharide phosphorylation in mouse lymphoma cells: specificity and kinetics of binding to the mannose 6-phosphate receptor in vivo. 95:536.
— *See* Einstein and Gabel.
— *See* Goldberg, Gabel, and Kornfeld.
— *See* Suh, Bergmann, and Gabel.
Gabel, G. A., and Kornfeld, S. Targeting of β-glucuronidase to lysosomes in mannose 6-phosphate receptor-deficient MOPC 315 cells. 99:296.
Gaboli, M. *See* Dejana, Colella, Conforti, Abbadini, Gaboli, and Marchisio.
— *See* Dejana, Lampugnani, Giorgi, Gaboli, Federici, Ruggeri, and Marchisio.
Gabrion, J. *See* Chambard, Gabrion, and Mauchamp.
— *See* Chambard, Verrier, Gabrion, and Mauchamp.
Gagnon, C. *See* Bouchard, Gagnon, Phillips, and Bardin.
— *See* de Lamirande and Gagnon.
Gailit, J. *See* Nathan, Srimal, Farber, Sanchez, Kabbash, Asch, Gailit, and Wright.
— *See* Singer, Scott, Kawka, Kazazis, Gailit, and Ruoslahti.
Gaillard, J. *See* Pfeiffer, Jakob, Mikoshiba, Dubois, Guenet, Nicolas, Gaillard, Chevance, and Jacob.
Gainer, H. *See* Fink and Gainer.
Gaines, K. C. *See* Baumann, Jahreis, and Gaines.
Gajdusek, C., Carbon, S., Ross, R., Nawroth, P., and Stern, D. Activation of coagulation releases endothelial cell mitogens. 103:419.
—, **Dicorleto, P., Ross, R., and Schwartz, S. M.** An endothelial cell-derived growth factor. 85:467.
Gal, D., Simpson, E. R., Porter, J. C., and Snyder, J. M. Defective internalization of low-density lipoprotein in epidermoid cervical cancer cells. 92:597.
Gal, S., Willingham, M. C., and Gottesman, M. M. Processing and lysosomal localization of a glycoprotein whose secretion is transformation stimulated. 100:535.
— *See* McCoy, Gal, Schwartz, and Gottesman.
Galbraith, D. W. *See* Meyer, Afonso, and Galbraith.
Galetto, G. *See* Tarone, Ferracini, Galetto, and Comoglio.
— *See* Tarone, Galetto, Prat, and Comoglio.
Gall, G. *See* Kuettner, Pauli, Gall, Memoli, and Schenk.
Gall, J. *See* Yao, Blackburn, and Gall.
Gall, J. G. *See* Berg and Gall.
— *See* Epstein, Mahon, and Gall.
— *See* Findly and Gall.
— *See* Kay, Schmidt, and Gall.
— *See* Piñol-Roma, Swanson, Gall, and Dreyfuss.
— *See* Roth and Gall.
Gallagher, J. T. *See* Spooncer, Gallagher, Krizsa, and Dexter.
Gallagher, P., Henneberry, J., Wilson, I., Sambrook, J., and Gething, M.-J. Addition of carbohydrate side chains at novel sites on influenza virus hemagglutinin can modulate the folding, transport, and activity of the molecule. 107:2059.
Galli, S. J., Dvorak, A. M., Marcum, J. A., Ishizaka, T., Nabel, G., Der Simonian, H., Pyne, K., Goldin, J. M., Rosenberg, R. D., Cantor, H., and Dvorak, H. F. Mast cell clones: a model for the analysis of cellular differentiation. 95:435.
— *See* Dvorak, Hammel, Schulman, Peters, MacGlashan, Schleimer, Newball, Pyne, Dvorak, Lichtenstein, and Galli.
— *See* Hammel, Dvorak, Peters, Schulman, Dvorak, Lichtenstein, and Galli.
Gallin, E. K., and Livengood, D. R. Nonlinear current-voltage relationships in cultured macrophages. 85:160.
Gallin, J. I. *See* Nath, Flavin, and Gallin.
— *See* Rotrosen and Gallin.
Galloway, C. J. *See* Robbins, Oliver, Bateman, Krag, Galloway, and Mellman.
Galvin, N. J., Dixit, V. M., O'Rourke, K. M., Santoro, S. A., Grant, G. A., and Frazier, W. A. Mapping of epitopes for monoclonal antibodies against human platelet thrombospondin with electron microscopy and high sensitivity amino acid sequencing. 101:1434.
—, **Stockhausen, D., Meyers-Hutchins, B. L., and Frazier, W. A.** Association of the cyclic AMP chemotaxis receptor with the detergent-insoluble cytoskeleton of *Dictyostelium discoideum*. 98:584.
—, **Vance, P. M., Dixit, V. M., Fink, B., and Frazier, W. A.** Interaction of human thrombospondin with types I–V collagen: direct binding and electron microscopy. 104:1413.
Galvin, S. *See* Schermer, Galvin, and Sun.
Gambetti, P. *See* Heriot, Gambetti, and Lasek.
— *See* Papasozomenos, Autilio-Gambetti, and Gambetti.
— *See* Papasozomenos, Yoon, Crane, Autilio-Gambetti, and Gambetti.
— *See* Tessler, Autilio-Gambetti, and Gambetti.
Gambino, J., Bergen, L. G., and Morris, N. R. Effects of mitotic and tubulin mutations on microtubule architecture in actively growing protoplasts of *Aspergillus nidulans*. 99:830.
— *See* May, Gambino, Weatherbee, and Morris.
— *See* Weatherbee, May, Gambino, and Morris.
Gamou, S. *See* Hirai, Gamou, Minoshima, and Shimizu.
Ganem, D. *See* Simon, Lingappa, and Ganem.
Ganguly, P. *See* Hall and Ganguly.
Ganz, T. *See* Joiner, Ganz, Albert, and Rotrosen.
Garavito, R. M., and Rosenbusch, J. P. Three-dimensional crystals of an integral membrane protein: an initial x-ray analysis. 86:327.
Garbe, J. C. *See* Bendena, Garbe, Traverse, Lakhotia, and Pardue.
Garber, E. A. *See* Wang, Cairncross, Yung, Garber, and Liem.
Garber, R. C. *See* Satter, Garber, Khairallah, and Cheng.
Garbers, D. L. *See* Ward, Brokaw, Garbers, and Vacquier.
Garbi, C., and Wollman, S. H. Basal lamina formation on thyroid epithelia in separated follicles in suspension culture. 94:489.
Garchon, H.-J., and Davis, M. M. The XLR gene product defines a novel set of proteins stabilized in the nucleus by zinc ions. 108:779.
Garcia, A., Coudrier, E., Carboni, J., Anderson, J., Vandekerkhove, J., Mooseker, M., Louvard, D., and Arpin, M. Partial deduced sequence of the 110-kD–calmodulin complex of the avian intestinal microvillus shows that this mechanoenzyme is a member of the myosin I family. 109:2895.
— *See* Arpin, Pringault, Finidori, Garcia, Jeltsch, Vandekerckhove, and Louvard.
Garcia, J. V., Gehm, B. D., and Rosner, M. R. An evolutionarily conserved enzyme degrades transforming growth factor-alpha as well as insulin. 109:1301.
—, **Stoppelli, M. P., Decker, S. S., and Rosner, M. R.** An insulin epidermal growth factor–binding protein from *Drosophila* has insulin-degrading activity. 108:177.
—, **Stoppelli, M. P., Thompson, K. L., Decker, S. J., and Rosner, M. R.** Characterization of a *Drosophila* protein that binds both epidermal growth factor and insulin-related growth factors. 105:449.
Garcia, P. D., Ou, J.-H., Rutter, W. J., and Walter, P. Targeting of the hepatitis B virus precore protein to the endoplasmic reticulum membrane: after signal peptide cleavage translocation can be aborted and the product released into the cytoplasm. 106:1093.
—, **and Walter, P.** Full-length prepro-α-factor can be translocated across the mammalian microsomal membrane only if translation has not terminated. 106:1043.
Garcia-Pardo, A. *See* Wayner, Garcia-Pardo, Humphries, McDonald, and Carter.
Gard, D. L., and Kirschner, M. W. A microtubule-associated protein from *Xenopus* eggs that specifically promotes assembly at the plus-end. 105:2203.
—, **and Kirschner, M. W.** A polymer-dependent increase in phosphorylation of β-tubulin accompanies differentiation of mouse neuroblastoma cell line. 100:764.
—, **and Kirschner, M. W.** Microtubule assembly in cytoplasmic extracts of *Xenopus* oocytes and eggs. 105:2191.
Gardiner, D. M., and Grey, R. D. Membrane junctions in *Xenopus* eggs: their distribution suggests a role in calcium regulation. 96:1159.
Gardner, J. M., and Fambrough, D. M. Fibronectin expression during myogenesis. 96:474.
Garland, P. B. *See* Foley, MacGregor, Kusel, Garland, Downie, and Moore.
Garner, C. C., and Matus, A. Different forms of microtubule-associated protein 2 are encoded by separate mRNA transcripts. 106:779.
Garner, J. A., and Lasek, R. J. Clathrin is axonally transported as part of slow component b: The microfilament complex. 88:172.
Garofalo, R. S., Gilligan, D. M., and Satir, B. H. Calmodulin antagonists inhibit secretion in *Paramecium*. 96:1072.
—, **and Satir, B. H.** *Paramecium* secretory granule content: quantitative studies on in vitro expansion and its regulation by calcium pH. 99:2193.
Garoff, H., Kondor-Koch, C., Pettersson, P., and Burke, B. Expression of Semliki Forest virus proteins from cloned complementary DNA. II. The membrane-spanning glycoprotein E2 is transported to the cell surface without its normal cytoplasmic domain. 97:652.
— *See* Cutler and Garoff.
— *See* Cutler, Melancon, and Garoff.
— *See* Kondor-Koch, Burke, and Garoff.
— *See* Roman and Garoff.
Garreau de Loubresse, N. *See* Ruiz, Garreau de Loubresse, and Beisson.

Garrett, J. *See* Emr, Vassarotti, Garrett, Geller, Takeda, and Douglas.
Garrido, J. *See* Brandan, Maldonado, Garrido, and Inestrosa.
— *See* Gonzalez, Garrido, and Vial.
Garrigues, H. J., Lark, M. W., Lara, S., Hellström, I., Hellström, K. E., and Wight, T. N. The melanoma proteoglycan: restricted expression on microspikes, a specific microdomain of the cell surface. 103:1699.
Garrod, D. R. *See* Watt, Mattey, and Garrod.
Gartung, C. *See* Braulke, Gartung, Hasilik, and von Figura.
Gase, J.-M., Renoir, J.-M., Radanyiu, C., Joab, I., Tuohimaa, P., and Baulieu, E.-E. Progesterone receptor in the chick oviduct: an immunohistochemical study with antibodies to distinct receptor components. 99:1193.
Gasson, J. C., and Bourgeois, S. A new determinant of glucocorticoid sensitivity in lymphoid cell lines. 96:409.
Gatchalian, C. L., Schachner, M., and Sanes, J. R. Fibroblasts that proliferate near denervated synaptic sites in skeletal muscle synthesize the adhesive molecules tenascin (J1), N-CAM, fibronectin, and a heparan sulfate proteoglycan. 108:1873.
Gatmaitan, Z., Jefferson, D. M., Ruiz-Opazo, N., Biempica, L., Arias, I., Dudas, G., Leinwand, L., and Reid, L. M. Regulation of growth and differentiation of a rat hepatoma cell line by the synergistic interactions of hormones and collagenous substrata. 97:1179.
— *See* Rojkind, Gatmaitan, Mackensen, Giambrone, Ponce, and Reid.
— *See* Spray, Ginzberg, Morales, Gatmaitan, and Arias.
Gatti, G. *See* Pozzan, Gatti, Dozzio, Vicentini, and Meldolesi.
Gauthier, G. F., Burke, R. E., Lowey, S., and Hobbs, A. W. Myosin isozymes in normal and cross-reinnervated cat skeletal muscle fibers. 97:756.
—, **Lowey, S., Benfield, P. A., and Hobbs, A. W.** Distribution and properties of myosin isozymes in developing avian and mammalian skeletal muscle fibers. 92:471.
Gavin, R. H. *See* Grimes and Gavin.
Gavrilovic, J. *See* Mirsky, Winter, Abeny, Pruss, Gavrilovic, and Raff.
Gawdi, G. *See* Prpic, Uhing, Weiel, Jakoi, Gawdi, Herman, and Adams.
Gay, S. *See* Martinez-Hernandez, Gay, and Miller.
Gay, S. W. *See* Kosher, Kulyk, and Gay.
Gazzano, H. *See* Carpentier, Gazzano, van Obberghen, Feihlmann, Freychet, and Orci.
Gebhart, B. *See* Goodenough, Gebhart, Mecham, and Heuser.
Gebicke-Haerter, P. J. *See* Majack, Castle, Goodman, Weisgraber, Mahley, Shooter, and Gebicke-Haerter.
Geering, K., Kraehenbuhl, J.-P., and Rossier, B. C. Maturation of the catalytic α-subunit of Na, K-ATPase during intracellular transport. 105:2613.
— *See* Verrey, Schnerer, Zoerkler, Paccolat, Geering, Kraehenbuhl, and Rossier.
Geetha-Habib, M., and Bouck, G. B. Synthesis and mobilization of flagellar glycoproteins during regeneration in *Euglena*. 93:432.
Geha, R. S. *See* Chatila, Geha, and Arnaout.
Gehlsen, K. R., Argraves, W. S., Pierschbacher, M. D., and Ruoslahti, E. Inhibition of in vitro tumor cell invasion by *Arg-Gly-Asp*–containing synthetic peptides. 106:925.
— *See* Languino, Gehlsen, Wayner, Carter, Engvall, and Ruoslahti.
Gehm, B. D. *See* Garcia, Gehm, and Rosner.
Gehring, W. J. *See* Binder, Tourmente, Roth, Renaud, and Gehring.
Gehron Robey, P., Young, M. F., Fisher, L. W., and McClain, T. D. Thrombospondin is an osteoblast-derived component of mineralized extracellular matrix. 108:719.
—, **Young, M. F., Flanders, K. C., Roche, N. S., Kondaiah, P., Reddi, A. H., Termine, J. D., Sporn, M. B., and Roberts, A. B.** Osteoblasts synthesize and respond to transforming growth factor-type β (TGF-β) in vitro. 105:457.
Geiger, B., Avnur, Z., and Schlessinger, J. Restricted mobility of membrane constituents in cell-substrate focal contacts of chicken fibroblasts. 93:495.
—, **Dutton, A. H., Tokuyasu, K. T., and Singer, S. J.** Immunoelectron microscope studies of membrane-microfilament interactions: Distributions of α-actinin, tropomyosin, and vinculin in intestinal epithelial brush border and chicken gizzard smooth muscle cells. 91:614.
—, **Rosen, D., and Berke, G.** Spatial relationships of microtubule-organizing centers and the contact area of cytotoxic T lymphocytes and target cells. 95:137.
—, **Volk, T., and Volberg, T.** Molecular heterogeneity of adherens junctions. 101:1523.
— *See* Avnur, Small, and Geiger.
— *See* Bendori, Salomon, and Geiger.
— *See* Franke, Schmid, Wellsteed, Grund, Gigi, and Geiger.
— *See* Green, Geiger, Jones, Talian, and Goldman.
— *See* Rinnerthaler, Geiger, and Small.
— *See* Scherson, Kreis, Schlessinger, Littauer, Borisy, and Geiger.
— *See* Volberg, Geiger, Kartenbeck, and Franke.
— *See* Volk and Geiger.
Geisow, M. J., Hart, P. D., and Young, M. R. Temporal changes of lysosome and phagosome pH during phagolysosome formation in macrophages: studies by fluorescence spectroscopy. 89:645.
Geisterfer, A. A. T. *See* Owens, Geisterfer, Yang, and Komoriya.
Gelboin, H. V. *See* Brands, Snider, Hino, Park, Gelboin, and Rothman.
Gelehrter, T. D. *See* Baumann, Gelehrter, and Doyle.
— *See* McDonald and Gelehrter.
Gelfand, V. I. *See* Kuznetsov, Rodionov, Nadezhdina, Murphy, and Gelfand.
Gelfman, C. E. *See* Fallon and Gelfman.
Geller, B. L. *See* Emr, Vassarotti, Garrett, Geller, Takeda, and Douglas.
Geller, H. M., and Dubois-Dalcq, M. Antigenic and functional characterization of a rat central nervous system-derived cell line immortalized by a retroviral vector. 107:1977.
Geller, R. L. *See* Grunwald, Geller, and Lilien.
Gelman, B. B., Davis, M. H., Morris, R. E., and Gruenstein, E. Structural changes in lysosomes from cultured human fibroblasts in Duchenne's muscular dystrophy. 88:329.
Gennarini, G., Cibelli, G., Rougon, G., Mattei, M.-G., and Goridis, C. The mouse neuronal cell surface protein F3: a phosphatidylinositol-anchored member of the immunoglobulin superfamily related to chicken contactin. 109:775.
Gennaro, R., Dewald, B., Horisberger, U., Gubler, H. U., and Baggiolini, M. A novel type of cytoplasmic granule in bovine neutrophils. 96:1651.
Genton, C., Kruithof, E. K. O., and Schleuning, W.-D. Phorbol ester induces the biosynthesis of glycosylated and nonglycosylated plasminogen activator inhibitor 2 in high excess over urokinasetype plasminogen activator in human U-937 lymphoma cells. 104:705.
Gentry, M. K. *See* Abramson, Ellisman, Deerinck, Maulet, Gentry, Doctor, and Taylor.
Genty, N. *See* Matlin, Bainton, Pesonen, Louvard, Genty, and Simons.
Geoffroy, J. S., and Rosen, S. D. Demonstration that a lectin-like receptor ($GP90^{MEL}$) directly mediates adhesion of lymphocytes to high endothelial venules of lymph nodes. 109:2463.
Georgatos, S. D., and Blobel, G. Lamin B constitutes an intermediate filament attachment site at the nuclear envelope. 105:117.
—, **and Blobel, G.** Two distinct attachment sites for vimentin along the plasma membrane and the nuclear envelope in avian erythrocytes: a basis for a vectorial assembly of intermediate filaments. 105:105.
—, **and Marchesi, V. T.** The binding of vimentin to human erythrocyte membranes: a model system for the study of intermediate filament-membrane interactions. 100:1955.
—, **Maroulakou, I., and Blobel, G.** Lamin A, lamin B, and lamin B receptor analogues in yeast. 108:2069.
—, **Weaver, D. C., and Marchesi, V. T.** Site specificity in vimentin-membrane interactions: intermediate filament subunits associate with the plasma membrane via their head domains. 100:1962.
George, E. L. *See* Standart, Bray, George, Hunt, and Ruderman.
Georgieva-Hanson, V. *See* Kohtz, Georgieva-Hanson, Kohtz, Schook, and Puszkin.
Georgoff, I. *See* Isom, Georgoff, Salditt-Georgieff, and Darnell.
Gerace, L., Ottaviano, Y., and Kondor-Koch, C. Identification of a major polypeptide of the nuclear pore complex. 95:826.
— *See* Featherstone, Darby, and Gerace.
— *See* Holt, Snow, Senior, Haltiwanger, Gerace, and Hart.
— *See* Senior and Gerace.
— *See* Snow, Senior, and Gerace.
— *See* Suprynowicz and Gerace.
Gerhart, J., Wu, M., and Kirschner, M. Cell cycle dynamics of an M-phase specific cytoplasmic factor in *Xenopus laevis* oocytes and eggs. 98:1247.
Gerisch, G. *See* Andre, Brink, Gerisch, Isenberg, Noegel, Schleicher, Segall, and Wallraff.
— *See* Fisher, Merkl, and Gerisch.
— *See* Pagh and Gerisch.
— *See* Segall, Fisher, and Gerisch.
Gerrard, J. M. *See* Cohen, Gerrard, and White.
— *See* Wheeler, Gerrard, and Carroll.
Gershon, M. D. *See* Barasch, Gershon, Nunez, Tamir, and Al-Awqati.
— *See* Bernd, Gershon, Nunez, and Tamir.
— *See* Tamir, Theoharides, Gershon, and Askenase.
Gershoni, J. M., and Ohad, I. Chloroplast-cytoplasmic interrelations involved in chloroplast development in *Chlamydomonas reinhardi* y-1: Effect of selective depletion of chloroplast translates. 87:124.
— *See* Gorelick, Cohn, Freedman, Delahunt, Gershoni, and Jamieson.
Gerstenfeld, L. C., Chipman, S. D., Kelly, C. M., Hodgens, K. J., Lee, D. D., and Landis, W. J. Collagen expression, ultrastructural assembly,

and mineralization in cultures of chicken embryo osteoblasts. 106:979.
Gerton, G. L., and Millette, C. F. Generation of flagella by cultured mouse spermatids. 98:619.
Gestautas, V. *See* Skosey, Chow, Nusinow, May, Gestautas, and Niwa.
Gething, M.-J., Doms, R. W., York, D., and White, J. Studies on the mechanism of membrane fusion: site-specific mutagenesis of the hemagglutinin of influenza virus. 102:11.
— *See* Bird, Gething, and Sambrook.
— *See* Doyle, Roth, Sambrook, and Gething.
— *See* Doyle, Sambrook, and Gething.
— *See* Gallagher, Henneberry, Wilson, Sambrook, and Gething.
— *See* Hearing, Gething, and Sambrook.
— *See* Hearing, Hunter, Rodgers, Gething, and Sambrook.
— *See* Roth, Doyle, Sambrook, and Gething.
Geuens, G., Gundersen, G. G., Nuydens, R., Cornelissen, F., Bulinski, J. C., and De Brabander, M. Ultrastructural colocalization of tyrosinated and detryrosinated α-tubulin in interphase and mitotic cells. 103:1883.
—, **Hill, A. M., Levilliers, N., Adoutte, A., and De Brabander, M.** Microtubule dynamics investigated by microinjection of *Paramecium* axonemal tubulin: lack of nucleation but proximal assembly of microtubules at the kinetochore during prometaphase. 108:939.
— *See* De Brabander, Bulinski, Geuens, De Mey, and Borisy.
Geuze, H. J., Slot, J. W., and Schwartz, A. L. Membranes of sorting organelles display lateral heterogeneity in receptor distribution. 104:1715.
—, **Slot, J. W., Strous, G. J. A. M., Hasilik, A., and von Figura, K.** Possible pathways for lysosomal enzyme delivery. 101:2253.
—, **Slot, J. W., Strous, G. J. A. M., Hasilik, A., and von Figura, K.** Ultrastructural localization of the mannose 6-phosphate receptor in rat liver. 98:2047.
—, **Slot, J. W., Strous, G. J. A. M., Lodish, H. F., and Schwartz, A. L.** Immunocytochemical localization of the receptor for asialoglycoprotein in rat liver cell. 92:865.
—, **Slot, J. W., van der Ley, P. A., and Scheffer, R. C. T.** Use of colloidal gold particles in double-labeling immunoelectron microscopy of ultrathin frozen tissue sections. 89:653.
—, **Stoorvogel, W., Strous, G. J., Slot, J. W., Zijderhand-Bleekemolen, J., and Mellman, I.** The sorting of mannose 6-phosphate receptors and lysosomal membrane proteins occurs in endocytic vesicles. 107:2491.
— *See* Blok, Gibbs, Lienhard, Slot, and Geuze.
— *See* Chang, Slot, Geuze, and Crapo.
— *See* Slot and Geuze.
— *See* Stoorvogel, Geuze, Griffith, Schwartz, and Strous.
— *See* Stoorvogel, Geuze, Griffith, and Strous.
— *See* Stoorvogel, Geuze, and Strous.
— *See* Strous, van Kerkhof, Willemsen, Geuze, and Berger.
— *See* Strous, Willemsen, van Kerkhof, Slot, Geuze, and Lodish.
— *See* Zijderhand-Bleekemolen, Schwartz, Slot, Strous, and Geuze.
Gewalt, S. L. *See* Harris, and Gewalt.
Ghez, R. *See* Small, Blank, Ghez, and Pfenninger.
Ghinea, N., Fixman, A., Alexandru, D., Popov, D., Hasu, M., Ghitescu, L., Eskenasy, M., Simionescu, M., and Simionescu, N. Identification of albumin-binding proteins in capillary endothelial cells. 107:231.
—, **and Simionescu, N.** Anionized and cationized hemeundecapeptides as probes for cell surface charge and permeability studies: differentiated labeling of endothelial plasmalemmal vesicles. 100:606.
Ghitescu, L., and Fixman, A. Surface charge distribution of the endothelial cell of liver sinusoids. 99:639.
—, **Fixman, A., Simionescu, M., and Simionescu, N.** Specific binding sites for albumin restricted to plasmalemmal vesicles of continuous capillary endothelium: receptor-mediated transcytosis. 102:1304.
— *See* Ghinea, Fixman, Alexandru, Popov, Hasu, Ghitescu, Eskenasy, Simionescu, and Simionescu.
Ghosh, H. P. *See* Bergeron, Kotwal, Levine, Bilan, Rachubinski, Hamilton, Shore, and Ghosh.
Ghosh, P.C., Wellner, R. B., Cragoe, E. J., Jr., and Wu, H. C. Enhancement of ricin cytotoxicity in Chinese hamster ovary cells by depletion of intracellular K^+: evidence for an Na^+/H^+ exchange system in Chinese hamster ovary cells. 101:350.
Ghosh, S. *See* Dotto, Moellmann, Ghosh, Edwards, and Halaban.
Giambrone, M.-A. *See* Czaja, Weiner, Flanders, Giambrone, Wind, Biempica, and Zern.
— *See* Rojkind, Gatmaitan, Mackensen, Giambrone, Ponce, and Reid.
Giancotti, F. *See* Albini, Allavena, Melchiori, Giancotti, Richter, Comoglio, Parodi, Martin, and Tarone.
Giancotti, F. G., Comoglio, P. M., and Tarone, G. Fibronectin–plasma membrane interaction in the adhesion of hemopoietic cells. 103:429.
Giannattasio, G., Zanini, A., Rosa, P., Meldolesi, J., Margolis, R. K., and Margolis, R. U. Molecular organization of prolactin granules. III. Intracellular transport of sulfated glycosaminoglycans and glycoproteins of the bovine prolactin granule matrix. 86:273.
— *See* Zanini, Giannattasio, Nussdorfer, Margolis, Margolis, and Meldolesi.
Gibbons, B. H. Intermittent swimming in live sea urchin sperm. 84:1.
—, **and Gibbons, I. R.** Calcium-induced quiescence in reactivated sea urchin sperm. 84:13.
—, **Tang, W.-J. Y., and Gibbons, I. R.** Organic anions stabilize the reactivated motility of sperm flagella and the latency of dynein 1 ATPase activity. 101:1281.
Gibbons, I. R. *See* Gibbons and Gibbons.
— *See* Gibbons, Tang, and Gibbons.
— *See* Mocz, Tang, and Gibbons.
Gibbons, J. T. *See* Kanwar, Hascall, Jakubowski, and Gibbons.
Gibbs, E. M. *See* Blok, Gibbs, Lienhard, Slot, and Geuze.
Gibbs, S. P. *See* Ludwig and Gibbs.
Gibney, E. *See* Fitch, Gibney, Sanderson, Mayne, and Linsenmayer.
— *See* Linsenmayer, Fitch, Schmid, Zak, Gibney, Sanderson, and Mayne.
— *See* Linsenmayer, Gibney, and Fitch.
— *See* Linsenmayer, Gibney, Fitch, Gross, and Mayne.
Gibson, G. J., Beaumont, B. W., and Flint, M. H. Synthesis of a low molecular weight collagen by chondrocytes from the presumptive calcification region of the embryonic chick sterna: the influence of culture with collagen gels. 99:208.
—, **and Flint, M. H.** Type X collagen synthesis by chick sternal cartilage and its relationship to endochondral development. 101:277.
—, **Schor, S. L., and Grant, M. E.** Effects of matrix macromolecules on chondrocyte gene expression: synthesis of a low molecular weight collagen species by cells cultured within collagen gels. 93:767.
Gicquaud, C. *See* Laliberte and Gicquaud.
Giddings, T. H., Jr., Brower, D. L., and Staehelin, L. A. Visualization of particle complexes in the plasma membrane of *Micrasterias denticulata* associated with the formation of cellulose fibrils in primary and secondary cell walls. 84:327.
—, **and Staehelin, L. A.** Ribosome binding sites visualized on freeze-fractured membranes of the rough endoplasmic reticulum. 85:147.
Giebelhaus, D. H., Zelus, B. D., Henchman, S. K., and Moon, R. T. Changes in the expression of α-fodrin during embryonic development of *Xenopus laevis*. 105:843.
Gieselmann, V., Pohlmann, R., Hasilik, A., and von Figura, K. Biosynthesis and transport of cathepsin D in cultured human fibroblasts. 97:1.
Giffard, R. G., Weeds, A. G., and Spudich, J. A. Ca^{2+}-dependent binding of severin to actin: a one-to-one complex is formed. 98:1796.
Gigi, O. *See* Franke, Schmid, Wellsteed, Grund, Gigi, and Geiger.
Giguere, L. *See* Gospodarowicz, Hirabayashi, Giguere, and Tauber.
Gilbert, L. K. *See* Mullock, Branch, van Schaik, Gilbert, and Luzio.
Gilbert, R. *See* Fairbairn, Gilbert, Ojakian, Schwimmer, and Quigley.
Gilbert, S. P., and Sloboda, R. D. A squid dynein isoform promotes axoplasmic vesicle translocation. 109:2379.
—, **and Sloboda, R. D.** Bidirectional transport of fluorescently labeled vesicles introduced into extruded axoplasm of squid *Loligo pealei*. 99:445.
—, **and Sloboda, R. D.** Identification of a MAP 2-like ATP-binding protein associated with axoplasmic vesicles that translocate on isolated microtubules. 103:947.
Gilchrest, B. A. *See* Yaar, Palleroni, and Gilchrest.
Gilkey, J. C. Roles of calcium and pH in activation of eggs of the medaka fish, *Oryzias latipes*. 97:669.
Gill, P. J. *See* Brody, Vaccaro, Gill, and Silbert.
Gillessen, D. *See* Skalli, Ropraz, Trzeciak, Benzonana, Gillessen, and Gabbiani.
Gillham, N. W. *See* Schmidt, Myers, Gillham, and Boynton.
— *See* Schmidt, Richardson, Gillham, and Boynton.
Gillies, R. J., Ogino, T., Shulman, R. G., and Ward, D. C. ^{31}P Nuclear magnetic resonance evidence for the regulation of intracellular pH by Ehrlich ascites tumor cells. 95:24.
Gilligan, D. M., and Satir, B. H. Stimulation and inhibition of secretion in *Paramecium*: role of divalent cations. 97:224.
— *See* Garofalo, Gilligan, and Satir.
Gilmartin, M. E., Mitchell, J., Vidrich, A., and Freedberg, I. M. Dual regulation of intermediate filament phosphorylation. 98:1144.
Gilmore, R., Blobel, G., and Walter, P. Protein translocation across the endoplasmic reticulum. I. Detection in the microsomal membrane of a receptor for the signal recognition particle. 95:463.
—, **Walter, P., and Blobel, G.** Protein translocation across the endoplas-

mic reticulum. II. Isolation and characterization of the signal recognition particle receptor. 95:470.
— *See* Connolly, Collins, and Gilmore.
— *See* Connolly and Gilmore.
— *See* Hull, Gilmore, and Lamb.
— *See* Wilson, Connolly, Morrison, and Gilmore.
Gilson, C. A., Ackland, N., and Burnside, B. Regulation of reactivated elongation in lysed cell models of teleost retinal cones by cAMP and calcium. 102:1047.
Gilula, N. B. *See* Gimlich, Kumar, and Gilula.
— *See* Hertzberg, Anderson, Friedlander, and Gilula.
— *See* Kumar and Gilula.
Gimbrone, M. A., Jr. *See* Gunther, Alexander, Atkinson, and Gimbrone.
— *See* Larson, Fujiwara, Alexander, and Gimbrone.
— *See* Muller and Gimbrone.
— *See* White, Gimbrone, and Fujiwara.
Gimenez-Gallego, G. *See* Schreiber, Kenney, Kowalski, Thomas, Gimenez-Gallego, Rios-Candelore, Di Salvo, Barritault, Courty, Courtois, Moenner, Loret, Burgess, Mehlman, Friesel, Johnson, and Maciag.
Gimlich, R. L., Kumar, N. M., and Gilula, N. B. Sequence and developmental expression of mRNA coding for a gap junction protein in *Xenopus*. 107:1065.
Gingell, D., Todd, I., and Bailey, J. Topography of cell-glass apposition revealed by total internal reflection fluorescence of volume markers. 100:1334.
Gingrich, J. C., Blaha, L. K., and Glazer, A. N. Rod substructure in cyanobacterial phycobilisomes: analysis of *Synechocystis* 6701 mutants low in phycoerythrin. 92:261.
—, **Williams, R. C., and Glazer, A. N.** Rod substructure in cyanobacterial phycobilisomes: phycoerythrin assembly in *Synechocystis* 6701 phycobilisomes. 95:170.
— *See* Williams, Gingrich, and Glazer.
Ginsberg, M. *See* Duperray, Berthier, Chagnon, Ryckewaert, Ginsberg, Plow, and Marguerie.
— *See* Painter and Ginsberg.
— *See* Ryo, Nakeff, Huang, Ginsberg, and Deuel.
Ginsberg, M. H., Wencel, J. D., White, J. G., and Plow, E. F. Binding of fibronectin to α-granule-deficient platelets. 97:571.
— *See* Shadle, Ginsberg, Plow, and Barondes.
— *See* Tranqui, Andrieux, Hudry-Clergeon, Ryckewaert, Soyez, Chapel, Ginsberg, Plow, and Marguerie.
Ginsburg, V. *See* Roberts, Sherwood, and Ginsburg.
Ginsel, L. *See* Schweizer, Fransen, Bächi, Ginsel, and Hauri.
Ginzberg, R. D. *See* Spray, Ginzberg, Morales, Gatmaitan, and Arias.
Giorgi, M. *See* Dejana, Lampugnani, Giorgi, Gaboli, Frederici, Ruggeri, and Marchisio.
Gipson, I. K., Grill, S. M., Spurr, S. J., and Brennan, S. J. Hemidesmosome formation in vitro. 97:849.
— *See* Fujikawa, Foster, Gipson, and Colvin.
— *See* Trinkaus-Randall and Gipson.
— *See* Zieske, Bukusoglu, and Gipson.
Giroux, C. N. *See* Dresser and Giroux.
Gispen, W. H. *See* Van Hooff, Holthuis, Oestreicher, Boonstra, De Graan, and Gispen.
Gitelman, S. E., and Witman, G. B. Purification of calmodulin from *Chlamydomonas*: Calmodulin occurs in cell bodies and flagella. 87:764.
Githens, S., Holmquist, D. R. G., Whelan, J. F., and Ruby J. R. Characterization of ducts isolated from the pancreas of the rat. 85:122.
Giugni, T. D., Braslau, D. L., and Haigler, H. T. Electric field–induced redistribution and postfield relaxation of epidermal growth factor receptors on A431 cells. 104:1291.
Giulian, D., Allen, R. L., Baker, T. J., and Tomozawa, Y. Brain peptides and glial growth. I. Glia-promoting factors as regulators of gliogenesis in the developing and injured central nervous system. 102:803.
—, **and Baker, T. J.** Peptides released by ameboid microglia regulate astroglial proliferation. 101:2411.
—, **and Young, D. G.** Brain peptides and glial growth. II. Identification of cells that secrete glia-promoting factors. 102:812.
Giulian, G. G. *See* Moss, Giulian, and Greaser.
Glabe, C. G. Interaction of the sperm adhesive protein, bindin, with phospholipid vesicles. I. Specific association of bindin with gel-phase phospholipid vesicles. 100:794.
— Interaction of the sperm adhesive protein, bindin, with phospholipid vesicles. II. Bindin induces the fusion of mixed-phase vesicles that contain phosphatidylcholine and phosphatidylserine in vitro. 100:800.
—, **Grabel, L. B., Vacquier, V. D., and Rosen, S. D.** Carbohydrate specificity of sea urchin sperm bindin: a cell surface lectin mediating sperm-egg adhesion. 94:123.
Glacy, S. D. Pattern and time course of rhodamine-actin incorporation in cardiac myocytes. 96:1164.
— Subcellular distribution of rhodamine-actin microinjected into living fibroblastic cells. 97:1207.
Glanville, R. W. *See* Keene, Engvall, and Glanville.
Glaser, B. M., D'Amore, P. A., Michels, R. G., Patz, A., and Fenselau, A. Demonstration of vasoproliferative activity from mammalian retina. 84:298.
Glaser, L. *See* Cole and Glaser.
— *See* Cole, Loewy, Cross, Akeson, and Glaser.
— *See* Cole, Schubert, and Glaser.
— *See* Lathrop, Olson, and Glaser.
— *See* Lathrop, Thomas, and Glaser.
— *See* Munson, Caldwell, and Glaser.
— *See* Ratner, Bunge, and Glaser.
— *See* Ratner, Elbein, Bunge, Porter, Bunge, and Glaser.
— *See* Ratner, Glaser, and Bunge.
— *See* Salzer, Bunge, and Glaser.
— *See* Salzer, Williams, Glaser, and Bunge.
— *See* Whitely and Glaser.
— *See* Whitely, Glaser, Zhuang, and Cassel.
Glaser, M. *See* Haverstick and Glaser.
Glass, C., and Fuchs, E. Isolation, sequence, and differential expression of a human K7 gene in simple epithelial cells. 107:1337.
—, **Kim, K. H., and Fuchs, E.** Sequence and expression of a human type II mesothelial keratin. 101:2366.
Glass, D. B. *See* Lamb, Fernandez, Conti, Adelstein, Glass, Welch, and Feramisco.
Glass, R. H., Aggeler, J., Spindle, A., Pedersen, R. A., and Werb, Z. Degradation of extracellular matrix by mouse trophoblast outgrowths: a model for implantation. 96:1108.
Glasser, S. R., Julian, J., Decker, G. L., Tang, J.-P., and Carson, D. D. Development of morphological and functional polarity in primary cultures of immature rat uterine epithelial cells. 107:2409.
— *See* Carson, Tang, Julian, and Glasser.
Glatt, M. *See* Müller-Glauser, Humbel, Glatt, Sträuli, Winterhalter, and Bruckner.
Glätzer, K. H., and Kloetzel, P.-M. Differential chromosomal distribution of ribonucleoprotein antigens in nuclei of *Drosophila* spermatocytes. 103:2113.
Glaumann, H. *See* Marzella, Ahlberg, and Glaumann.
Glazebrook, P. A. *See* Gonzalez-Fernandez, Landers, Glazebrook, Fong, Liou, Lam, and Bridges.
Glazer, A. N. *See* Gingrich, Blaha, and Glazer.
— *See* Gingrich, Williams, and Glazer.
— *See* Lundell, Yamanaka, and Glazer.
— *See* Oi, Glazer, and Stryer.
— *See* Williams, Gingrich, and Glazer.
Glenney, J. R., Jr., and Glenney, P. Comparison of Ca^{++}-regulated events in the intestinal brush border. 100:754.
—, **Glenney, P., and Weber, K.** The spectrin-related molecule, TW/240, cross-links the actin bundles of the microvillus, rootlets in the brush borders of intestinal epithelial cells. 96:1491.
—, **Kindy, M. S., and Zokas, L.** Isolation of a new member of the S100 protein family: amino acid sequence, tissue, and subcellular distribution. 108:569.
—, **Tack, B., and Powell, M. A.** Calpactins: two distinct Ca^{++}-regulated phospholipid- and actin-binding proteins isolated from lung and placenta. 104:503.
—, **and Zokas, L.** Novel tyrosine kinase substrates from Rous sarcoma virus-transformed cells are present in the membrane skeleton. 108:2401.
— *See* Bourguignon, Suchard, Nagpal, and Glenney.
— *See* Zokas and Glenney.
Glenney, P. *See* Glenney and Glenney.
— *See* Glenney, Glenney, and Weber.
Glennon, M. C. *See* Nachmias, Yoshida, and Glennon.
Glickman, J., Croen, K., Kelly, S., and Al-Awqati, Q. Golgi membranes contain an electrogenic H^+ pump parallel to a chloride conductance. 97:1303.
Glicksman, M. A. *See* Hirokawa, Glicksman, and Willard.
Glimcher, M. J. *See* Landis, Sanzone, Brickley-Parsons, and Glimcher.
Gliniak, B. *See* Kabat, Gliniak, Rohrschneider, and Polonoff.
Glomset, J. A. *See* Schmidt, Glomset, Wight, Habenicht, and Ross.
Glorieux, F. H. *See* Ecarot-Charrier, Glorieux, van der Rest, and Pereira.
Glössl, J. *See* Schmidt, Robenek, Harrach, Glössl, Nolte, Hörmann, Richter, and Kresse.
Glover, D. M. *See* Karess and Glover.
— *See* Raff and Glover.
Gluck, S. *See* Brown, Gluck, and Hartwig.
Glukhova, M. A., Frid, M. G., Shekhonin, B. V., Vasilevskaya, T. D.,

Grunwald, J., Saginati, M., and Koteliansky, V. E. Expression of extra domain A fibronectin sequence in vascular smooth muscle cells is phenotype dependent. 109:357.
— *See* Belkin, Ornatsky, Glukhova, and Koteliansky.
Gluzman, I. Y. *See* Krogstad, Schlesinger, and Gluzman.
Glyn, M. C. P. *See* Sasse, Glyn, Birkett, and Gull.
Gobel, U., Speth, V., and Bredt, W. Filamentous structures in adherent *Mycoplasma pneumoniae* cells treated with nonionic detergents. 91:537.
Godelaine, D., Beaufay, H., Wibo, M., and Ravoet, A.-M. Alteration of the membrane barrier in stripped rough microsomes from rat liver on incubation with GTP: its relevance to the stimulation by this nucleotide of the dolichol pathway for protein glycosylation. 97:340.
— *See* Paiement, Beaufay, and Godelaine.
— *See* Ravoet, Amar-Costesec, Godelaine, and Beaufay.
— *See* Wibo, Thines-Sempoux, Amar-Costesec, Beaufay, and Godelaine.
Godfraind, C., Friedrich, V. L., Holmes, S. B., and Dubois-Dalcq, M. In vivo analysis of glial cell phenotypes during a viral demyelinating disease in mice. 109:2405.
Godfrey, E. W., Dietz, M. E., Morstad, A. L., Wallskog, P. A., and Yorde, D. E. Acetylcholine receptor-aggregating proteins are associated with the extracellular matrix of many tissues in *Torpedo*. 106:1263.
—, **Nitkin, R. M., Wallace, B. G., Rubin, L. L., and McMahan, U. J.** Components of *Torpedo* electric organ and muscle that cause aggregation of acetylcholine receptors on cultured muscle cells. 99:615.
Godfrey, R. W., Manzi, R. M., Clark, M. A., and Hoffstein, S. T. Stimulus-specific induction of phospholipid and arachidonic acid metabolism in human neutrophils. 104:925.
Goebel, S. J. *See* Barnett, Kretschmer, Austen, Goebel, Hart, Elting, and Kamarck.
Goetinck, P. F., Stirpe, N. S., Tsonis, P. A., and Carlone, D. The tandemly repeated sequences of cartilage link protein contain the sites for interaction with hyaluronic acid. 105:2403.
Goetz, J. D. *See* Grinstein, Cohen, Goetz, and Rothstein.
Goff, L. J., and Coleman, A. W. The solution to the cytological paradox of isomorphy. 104:739.
Golan, D. E., Brown, C. S., Cianci, C. M. L., Furlong, S. T., and Caulfield, J. P. Schistosomula of *Schistosoma mansoni* use lysophosphatidylcholine to lyse adherent human red blood cells and immobilize red cell components. 103:819.
— *See* Bierer, Herrmann, Brown, Burakoff, and Golan.
— *See* Stolpen, Golan, and Pober.
Goldberg, A. L. *See* Tanaka, Waxman, and Goldberg.
Goldberg, B. D. Binding of soluble Type I collagen to fibroblasts: effects of thermal activation of ligand, ligand concentration, pinocytosis, and cytoskeletal modifiers. 95:747.
—, **and Burgeson, R. E.** Binding of soluble Type 1 collagen to fibroblasts: specificities for native collagen types, triple helical structure, telopeptides, propeptides, and cyanogen bromide-derived peptides. 95:752.
Goldberg, D. E., Gabel, C. A., and Kornfeld, S. Studies of the biosynthesis of the mannose 6-phosphate receptor in receptor-positive and receptor-deficient cell lines. 97:1700.
— *See* Gabel, Goldberg, and Kornfeld.
Goldberg, D. J., and Burmeister, D. W. Stages in axon formation: observations of growth of *Aplysia* axons in culture using video-enhanced contrast–differential interference contrast microscopy. 103:1921.
Goldberg, M., Belowski, L. S., and Bloom, B. R. Regulation of macrophage growth and antiviral activity by interferon-γ. 109:1331.
Goldberg, R. L., and Toole, B. P. Pericellular coat of chick embryo chondrocyt. . structural role of hyaluronate. 99:2114.
Goldenberg, S. *See* Bonaldo, Souto-Padron, de Souza, and Goldenberg.
Goldfarb, D. S. *See* Akey and Goldfarb.
— *See* White, Allis, Goldfarb, Srivastva, Weir, and Gorovsky.
Goldfine, I. D. *See* Logsdon, Moessner, Williams, and Goldfine.
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Goldfischer, S. *See* Schwartz, Bienkowski, Coltoff-Schiller, Goldfischer, and Blumenfeld.
Goldfischer, S. L. *See* Arias, Moser, and Goldfischer.
Goldin, J. M. *See* Galli, Dvorak, Marcum, Ishizaka, Nabel, Der Simonian, Pyne, Goldin, Rosenberg, Cantor, and Dvorak.
Goldmacher, V.S., Tinnel, N. L., and Nelson, B. C. Evidence that pinocytosis in lymphoid cells has a low capacity. 102:1312.
Goldman, A. E. *See* Jones, Goldman, Yang, and Goldman.
— *See* Yang, Lieska, Goldman, and Goldman.
— *See* Zackroff, Goldman, Jones, Steinert, and Goldman.
Goldman, B. *See* Kohtz, Discher, Inagami, and Goldman.
Goldman, B. M., and Blobel, G. In vitro biosynthesis, core glycosylation, and membrane integration of opsin. 90:236.
Goldman, D. *See* Black, Goldman, Hochschwender, Lindstrom, and Hall.
— *See* Cauley, Agranoff, and Goldman.
Goldman, I. S. *See* Burwen, Barker, Goldman, Hradek, Raper, and Jones.
Goldman, R. D. *See* Aynardi, Steinert, and Goldman.
— *See* Green, Geiger, Jones, Talian, and Goldman.
— *See* Jones and Goldman.
— *See* Jones, Goldman, Yang, and Goldman.
— *See* Jones, Yokoo, and Goldman.
— *See* Lieska, Yang, and Goldman.
— *See* Schloss and Goldman.
— *See* Talian, Olmsted, and Goldman.
— *See* Yang, Lieska, Goldman, and Goldman.
— *See* Zackroff, Goldman, Jones, Steinert, and Goldman.
Goldstein, J. L. *See* Anderson, Brown, Beisiegel, and Goldstein.
— *See* Anderson, Brown, and Goldstein.
— *See* Carpentier, Gorden, Anderson, Goldstein, Brown, Cohen, and Orci.
— *See* Jingami, Brown, Goldstein, Anderson, and Luskey.
— *See* Pathak, Merkle, Cummings, Goldstein, Brown, and Anderson.
— *See* Schneider, Slaughter, Goldstein, Anderson, Capra, and Brown.
Goldstein, L., and Ko, C. The distribution of proteins between nucleus and cytoplasm of *Amoeba proteus*. 88:516.
Goldstein, L. S. B., Laymon, R. A., and McIntosh, J. R. A microtubule-associated protein in *Drosophila melanogaster*: identification, characterization, and isolation of coding sequences. 102:2076.
— *See* Byers, Dubreuil, Branton, Kiehart, and Goldstein.
— *See* Byers, Husain-Chishti, Dubreuil, Branton, and Goldstein.
— *See* Dubreuil, Byers, Branton, Goldstein, and Kiehart.
— *See* Dubreuil, Byers, Sillman, Bar-Zvi, Goldstein, and Branton.
Goldstein, M. A. *See* Traeger and Goldstein.
Goldstein, S., and Korczack, L. B. Status of mitochondria in living human fibroblasts during growth and senescence in vitro: Use of the laser dye rhodamine. 91:123, 392.
— *See* Wojtyk and Goldstein.
Goltzman, D. *See* Warshawsky, Goltzman, Rouleau, and Bergeron.
Golumbeski, G. S. *See* Cardelli, Golumbeski, and Dimond.
Gomer, R. H., Datta, S., and Firtel, R. A. Cellular and subcellular distribution of a cAMP-regulated prestalk protein and prespore protein in *Dictyostelium discoideum*: a study on the ontogeny of prestalk and prespore cells. 103:1999.
—, **and Lazarides, E.** Highly homologous filamin polypeptides have different distributions in avian slow and fast muscle fibers. 97:818.
—, **and Lazarides, E.** Switching of filamin polypeptides during myogenesis in vitro. 96:321.
Gomperts, B. D. *See* Cockcroft, Howell, and Gomperts.
— *See* Howell, Cockcroft, and Gomperts.
Gonatas, J., Stieber, A., Olsnes, S., and Gonatas, N. K. Pathways involved in fluid phase and adsorptive endocytosis in neuroblastoma. 87:579.
Gonatas, J. O. *See* Gonatas, Stieber, Hickey, Herbert, and Gonatas.
Gonatas, N. K., Stieber, A., Hickey, W. F., Herbert, S. H., and Gonatas, J. O. Endosomes and Golgi vesicles in adsorptive and fluid phase endocytosis. 99:1379.
— *See* Gonatas, Stieber, Olsnes, and Gonatas.
Gonnella, P. *See* Siminoski, Gonnella, Bernanke, Owen, Neutra, and Murphy.
Gonnella, P. A., and Nachmias, V. T. Platelet activation and microfilament bundling. 89:146.
—, **and Neutra, M. R.** Membrane-bound and fluid-phase macromolecules enter separate prelysosomal compartments in absorptive cells of suckling rat ileum. 99:909.
Gonzalez, A., Garrido, J., and Vial, J. D. Epidermal growth factor inhibits cytoskeleton-related changes in the surface of parietal cells. 88:108.
— *See* Finidori, Rizzolo, Gonzalez, Kreibich, Adesnik, and Sabatini.
— *See* Gottlieb, Gonzalez, Rizzolo, Rindler, Adesnik, and Sabatini.
— *See* Rizzolo, Finidori, Gonzalez, Arpin, Ivanov, Adesnik, and Sabatini.
Gonzalez-Fernandez, F., Landers, R. A., Glazebrook, P. A., Fong, S.-L., Liou, G. I., Lam, D. M. K., and Bridges, C. D. B. An extracellular retinol-binding glycoprotein in the eyes of mutant rats with retinal dystrophy: development, localization, and biosynthesis. 99:2092.
Gonzalez-Noriega, A., Grubb, J. H., Talkad, V., and Sly, W. S. Chloroquine inhibits lysosmal enzyme pinocytosis and enhances lysosomal enzyme secretion by impairing receptor recycling. 85:839.
Gonzalez-Robles, A. *See* Sabanero, Gonzalez-Robles, and Meza.
González-Sánchez, A., and Bader, D. Characterization of a myosin heavy chain in the conductive system of the adult and developing chicken heart. 100:270.
Gonzalez-Serratos, H. *See* Somlyo, Gonzalez-Serratos, Shuman, McClellan, and Somlyo.
Gooch, J. *See* Way, Gooch, Pope, and Weeds.
Goodall, H., and Maro, B. Major loss of junctional coupling during mitosis in early mouse embryos. 102:568.

Goodenough, D. A., Dick, J. S. B., II, and Lyons, J. E. Lens metabolic cooperation: a study of mouse lens transport and permeability visualized with freeze-substitution autoradiography and electron microscopy. 86:576.
—, **Paul, D. L., and Jesaitis, L.** Topological distribution of two connexin32 antigenic sites in intact and split rodent hepatocyte gap junctions. 107:1817.
— *See* Anderson, Stevenson, Jesaitis, Goodenough, and Mooseker.
— *See* Baker, Caspar, Hollingshead, and Goodenough.
— *See* Beyer, Kistler, Paul, and Goodenough.
— *See* Beyer, Paul, and Goodenough.
— *See* D'Angelo Siliciano and Goodenough.
— *See* Fallon and Goodenough.
— *See* Gruijters, Kistler, Bullivant, and Goodenough.
— *See* Kensler and Goodenough.
— *See* Miller and Goodenough.
— *See* Paul and Goodenough.
— *See* Raviola, Goodenough, and Raviola.
— *See* St. John, Froehner, Goodenough, and Cohen.
— *See* Schuetze and Goodenough.
— *See* Stevenson, Anderson, Goodenough, and Mooseker.
— *See* Stevenson and Goodenough.
— *See* Stevenson, Siliciano, Mooseker, and Goodenough.
Goodenough, U. W. Cyclic AMP enhances the sexual agglutinability of *Chlamydomonas* flagella. 109:247.
— Motile detergent-extracted cells of *Tetrahymena* and *Chlamydomonas*. 96:1610.
—, **Adair, W. S., Collin-Osdoby, P., and Heuser, J. E.** Structure of the *Chlamydomonas* agglutinin and related flagellar surface proteins in vitro and in situ. 101:924.
—, **Detmers, P. A., and Hwang, C.** Activation for cell fusion in *Chlamydomonas*: analysis of wild-type gametes and nonfusing mutants. 92:378.
—, **Gebhart, B., Mecham, R. P., and Heuser, J. E.** Crystals of the *Chlamydomonas reinhardtii* cell wall: polymerization, depolymerization, and purification of glycoprotein monomers. 103:405.
—, **and Heuser, J. E.** Substructure of inner dynein arms, radial spokes, and the central pair/projection complex of cilia and flagella. 100:2008.
—, **and Heuser, J. E.** Substructure of the outer dynein arm. 95:798.
—, **and Heuser, J. E.** The *Chlamydomonas* cell wall and its constituent glycoproteins analyzed by the quick-freeze, deep-etch technique. 101: 1550.
— *See* Adair, Steinmetz, Mattson, Goodenough, and Heuser.
— *See* Detmers, Goodenough, and Condeelis.
— *See* Hoffman and Goodenough.
— *See* Mesland, Hoffman, Caligor, and Goodenough.
— *See* Pasquale and Goodenough.
— *See* Sale, Goodenough, and Heuser.
Goodhouse, J. *See* Brown, Goodhouse, and Farquhar.
Goodloe-Holland, C. M., and Luna, E. J. A membrane cytoskeleton from *Dictyostelium discoideum*. III. Plasma membrane fragments bind predominantly to the sides of actin filaments. 99:71.
— *See* Luna, Goodloe-Holland, and Ingalls.
Goodman, C. S. *See* Montell and Goodman.
Goodman, D. S. *See* Kato, Kato, and Goodman.
Goodman, L. V. *See* Majack, Castle, Goodman, Weisgraber, Mahley, Shooter, and Gebicke-Haerter.
— *See* Majack, Goodman, and Dixit.
Goodman, R., Slater, E., and Herschman, H. R. Epidermal growth factor induces tyrosine hydroxylase in a clonal pheochromocytoma cell line, PC-G2. 84:495.
Goodman, S. L., Deutzmann, R., and von der Mark, K. Two distinct cell-binding domains in laminin can independently promote nonneural cell adhesion and spreading. 105:589.
—, **Risse, G., and von der Mark, K.** The E8 subfragment of laminin promotes locomotion of myoblasts over extracellular matrix. 109:799.
— *See* Behrens, Birchmeier, Goodman, and Imhof.
Goodman, S. R. *See* Riederer, Zagon, and Goodman.
Goodrum, J. F. *See* Blaker, Goodrum, and Morell.
Goodwin, J. L. *See* Gresham, Goodwin, Allen, Anderson, and Brown.
Goorha, R. *See* Murti and Goorha.
Gorbsky, G., and Steinberg, M. S. Isolation of the intercellular glycoproteins of desmosomes. 90:243.
Gorbsky, G. J., and Borisy, G. G. Microtubules of the kinetochore fiber turn over in metaphase but not in anaphase. 109:653.
—, **Sammak, P. J., and Borisy, G. G.** Chromosomes move poleward in anaphase along stationary microtubules that coordinately disassemble from their kinetochore ends. 104:9.
—, **Sammak, P. J., and Borisy, G. G.** Microtubule dynamics and chromosome motion visualized in living anaphase cells. 106:1185.
— *See* Sammack, Gorbsky, and Borisy.
Gorden, P. *See* Barazzone, Lesniak, Gorden, Van Obberghen, Carpentier, and Orci.
— *See* Carpentier, Gorden, Anderson, Goldstein, Brown, Cohen, and Orci.
— *See* Carpentier, Obberghen, Gorden, and Orci.
— *See* Iacopetta, Carpentier, Pozzan, Lew, Gorden, and Orci.
Gordon, D. *See* Gown, Vogel, Gordon, and Lu.
— *See* Owens, Loeb, Gordon, and Thompson.
Gordon, G. W. *See* Nicklas and Gordon.
Gordon, J. A. *See* Witt, Brown, and Gordon.
— *See* Witt and Gordon.
Gordon, J. I. Intestinal epithelial differentiation: new insights from chimeric and transgenic mice. 108:1187.
— *See* Trahair, Neutra, and Gordon.
Gordon, J. S., Bruno, J., and Lucas, J. J. Heterogeneous binding of high mobility group chromosomal proteins to nuclei. 88:373.
— *See* Winter, Levy, and Gordon.
— *See* Winter, Pavlatnik, Williams, Coles, Wells, and Gordon.
Gordon, M. *See* Santos-Sacchi, and Gordon.
Gordon, M. K. *See* Sugrue, Gordon, Seyer, Dublet, van der Rest, and Olsen.
Gordon, P. B. *See* Seglen and Gordon.
Gordon, R. E. Orthogonal arrays in normal and injured respiratory airway epithelium. 100:648.
—, **Williams, K. B., and Puszkin, S.** Immune localization of calmodulin in the ciliated cells of hamster tracheal epithelium. 95:57.
Gordon, S. *See* Hume, Perry, and Gordon.
— *See* Morris, Crocker, and Gordon.
— *See* Stahl and Gordon.
Gorelick, F. S., Cohn, J. A., Freedman, S. D., Delahunt, N. G., Gershoni, J. M., and Jamieson, J. D. Calmodulin-stimulated protein kinase activity from rat pancreas. 97:1294.
Goren, M. B. *See* Wang and Goren.
Gorham, J. D. *See* Leonard, Gorham, Cole, Greene, and Ziff.
Goridis, C. *See* Covault, Merlie, Goridis, and Sanes.
— *See* Gennarini, Cibelli, Rougon, Mattei, and Goridis.
— *See* He, Finne, and Goridis.
— *See* Nguyen, Mattei, Mattei, Santoni, Goridis, and Jordan.
— *See* Pollerberg, Sadoul, Goridis, and Schachner.
— *See* Williams, Goridis, and Akeson.
Gorovsky, M. A. *See* Chicoine, Richman, Cook, Gorovsky, and Allis.
— *See* White, Allis, Goldfarb, Srivastva, Weir, and Gorovsky.
Gorr, S.-U., Stieger, B., Fransen, J. A., Kedinger, M., Marxer, A., and Hauri, H.-P. A novel marker glycoprotein for the microvillus membrane of surface colonocytes of rat large intestine and its presence in small-intestinal crypt cells. 106:1937.
Gorvel, J.-P., Mishal, Z., Liegey, F., Rigal, A., and Maroux, S. Conformational change of rabbit aminopeptidase N into enterocyte plasma membrane domains analyzed by flow cytometry fluorescence energy transfer. 108:2193.
Gorza, L., Sartore, S., and Schiaffino, S. Myosin types and fiber types in cardiac muscle. II. Atrial myocardium. 95:838.
—, **Sartore, S., Thornell, L. E., and Schiaffino, S.** Myosin types and fiber types in cardiac muscle. III. Nodal conduction tissue. 102:1758.
— *See* Sartore, Gorza, Bormioli, Libera, and Schiaffino.
Goshima, K., Masuda, A., and Owaribe, K. Insulin-induced formation of ruffling membranes of KB cells and its correlation with enhancement of amino acid transport. 98:801.
Goslin, K., and Banker, G. Experimental observations on the development of polarity by hippocampal neurons in culture. 108:1507.
—, **Birgbauer, E., Banker, G., and Solomon, F.** The role of cytoskeleton in organizing growth cones: a microfilament-associated growth cone component depends upon microtubules for its localization. 109:1621.
Gospodarowicz, D., Cheng, J., and Lirette, M. Bovine brain and pituitary fibroblast growth factors: comparison of their abilities to support the proliferation of human and bovine vascular endothelial cells. 97:1677.
—, **Hirabayashi, K., Giguere, L., and Tauber, J.-P.** Factors controlling the proliferative rate, final cell density, and life span of bovine vascular smooth muscle cells in culture. 89:568.
—, **Lepine, J., Massoglia, S., and Wood, I.** Comparison of the ability of basement membranes produced by corneal endothelial and mouse-derived endodermal PF-HR-9 cells to support the proliferation and differentiation of bovine kidney tubule epithelial cells in vitro. 99:947.
— *See* Gal, Willingham, and Gottesman.
— *See* Isaacs, Savion, Gospodarowicz, and Shuman.
— *See* Kato and Gospodarowicz.
— *See* Lander, Fujii, Gospodarowicz, and Reichardt.
— *See* Neufeld, Mitchell, Ponte, and Gospodarowicz.
— *See* Tseng, Savion, Gospodarowicz, and Stern.
Gossett, L. A., Zhang, W., and Olson, E. N. Dexamethasone-dependent

inhibition of differentiation of C2 myoblasts bearing steroid-inducible N-*ras* oncogenes. 106:2127.
Gotlib, L. *See* Edidin, Wei, and Gotlib.
Gotlieb, A. I., May, L. M., Subrahmanyan, L., and Kalnins, V. I. Distribution of microtubule organizing centers in migrating sheets of endothelial cells. 91:589.
—, Subrahmanyan, L., and Kalnins, V. I. Microtubule-organizing centers and cell migration: effect of inhibition of migration and microtubule disruption in endothelial cells. 96:1266.
— *See* Wong and Gotlieb.
Gottesman, M. M. *See* Abraham, Marcus, Cabral, and Gottesman.
— *See* Aszalos, Yang, and Gottesman.
— *See* Gal, Willingham, and Gottesman.
— *See* Hochman, Levy, Mador, Gottesman, Shearer, and Okon.
— *See* McCoy, Gal, Schwartz, and Gottesman.
Gottlieb, R. A., and Murphy, D. B. Analysis of the microtubule-binding domain of MAP-2. 101:1782.
Gottlieb, T. A., Gonzalez, A., Rizzolo, L., Rindler, M. J., Adesnik, M., and Sabatini, D. D. Sorting and endocytosis of viral glycoproteins in transfected polarized epithelial cells. 102:1242.
Gottmann, K., and Weijer, C. J. In situ measurements of external pH and optical density oscillations in *Dictyostelium discoideum* aggregates. 102:1623.
Gotto, A. M., Jr. *See* Benson, Bryan, Plant, Gotto, and Smith.
Goud, B., and Antoine, J.-C. Emergence of a surface immunoglobulin recycling process during B lymphocte differentiation. 98:1238.
—, Huet, C., and Louvard, D. Assembled and unassembled pools of clathrin: a quantitative study using an enzyme immunoassay. 100:521.
— *See* Moya, Dautry-Varsat, Goud, Louvard, and Boquet.
Gough, N. M. *See* Haeuptle, Flint, Gough, and Dobberstein.
Gould, H. *See* Allan, Cowling, Harborne, Cattini, Craigie, and Gould.
— *See* Allan, Harborne, Rau, and Gould.
— *See* Allan, Rau, Harborne, and Gould.
Gould, K. L., Cooper, J. A., Bretscher, A., and Hunter, T. The protein-tyrosine kinase substrate, p81, is homologous to a chicken microvillar core protein. 102:660.
—, Cooper, J.A., and Hunter, T. The 46,000-dalton tyrosine protein kinase substrate is widespread, whereas the 36,000-dalton substrate is only expressed at high levels in certain rodent tissues. 98:487.
Gould, S. J., Keller, G.-A., Hosken, N., Wilkinson, J., and Subramani, S. A conserved tripeptide sorts proteins to peroxisomes. 108:1657.
—, Keller, G.-A., and Subramani, S. Identification of a peroxisomal targeting signal at the carboxy-terminus of firefly luciferase. 105:2923.
—, Keller, G.-A., and Subramani, S. Identification of peroxisomal targeting signals located at the carboxy terminus of four peroxisomal proteins. 107:897.
Gould-Somero, M. *See* Jaffe, Gould-Somero, and Holland.
Gounon, P., and Karsenti, E. Involvement of contractile proteins in the changes in consistency of oocyte nucleoplasm of the newt *Pleurodeles waltlii*. 88:410.
— *See* Moreau, Angelier, Bonnanfant-Jais, Gounon, and Kubisz.
Gow, N. A. R. *See* Kropf, Caldwell, Gow, and Harold.
Gower, H. J. *See* Doherty, Barton, Dickson, Seaton, Rowett, Moore, Gower, and Walsh.
Gown, A. M., and Vogel, A. M. Monoclonal antibodies to intermediate filament proteins of human cells: unique and cross-reacting antibodies. 95:414.
—, Vogel, A. M., Gordon, D., and Lu, P. L. A smooth muscle-specific monoclonal antibody recognizes smooth muscle actin isozymes. 100:807.
Goyette, R. *See* Landry, Bernier, Ouellet, Goyette, and Marceau.
Grab, D. J., Carlin, R. K., and Siekevitz, P. Function of calmodulin in postsynaptic densities. I. Presence of a calmodulin-activatable cyclic nucleotide phosphodiesterase activity. 89:433.
—, Carlin, R. K., and Siekevitz, P. Function of calmodulin in postsynaptic densities. II. Presence of a calmodulin-activatable protein kinase activity. 89:440.
—, Ito, S., Kara, U. A. K., and Rovis, L. Glycosyltransferase activities in Golgi complex and endoplasmic reticulum fractions isolated from African trypanosomes. 99:569.
—, Webster, P., Ito, S., Fish, W. R., Verjee, Y., and Lonsdale-Eccles, J. D. Subcellular localization of variable surface glycoprotein phosphatidylinositol-specific phospholipase-C in African trypanosomes. 105:737.
— *See* Carlin, Grab, Cohen, and Siekevitz.
— *See* Carlin, Grab, and Siekevitz.
— *See* Webster and Grab.
Grabel, L. B., Singer, M. S., Martin, G. R., and Rosen, S. D. Teratocarcinoma stem cell adhesion: the role of divalent cations and a cell surface lectin. 96:1532.
—, and Watts, T. D. The role of extracellular matrix in the migration and differentiation of parietal endoderm from teratocarcinoma embryoid bodies. 105:441.
— *See* Dahl and Grabel.
— *See* Glabe, Grabel, Vacquier, and Rosen.
Graeve, L., Drickamer, K., and Rodriguez-Boulan, E. Polarized endocytosis by Madin–Darby canine kidney cells transfected with functional chicken liver glycoprotein receptor. 109:2809.
Grahl, K. *See* Fisher, Cui, Zhang, Hartman, Grahl, Guo-Yang, Tarpey, and Damsky.
Grainger, J. L., and Winkler, M. M. The sea urchin multicatalytic protease: purification, biochemical analysis, subcellular distribution, and relationship to snRNPs. 109:675.
Grainger, R. M. *See* Winkles and Grainger.
Gramzow, M., Bachmann, M., Uhlenbruck, G., Dorn, A., and Müller, W. E. G. Identification and further characterization of the specific cell binding fragment from sponge aggregation factor. 102:1344.
Grandori, C., and Hanafusa, H. $p60^{c\text{-}src}$ is complexed with a cellular protein in subcellular compartments involved in exocytosis. 107:2125.
Granelli-Piperno, A., and Reich, E. Plasminogen activators of the pituitary gland: enzyme characterization and hormonal modulation. 97:1029.
Granger, B. L., Repasky, E. A., and Lazarides, E. Synemin and vimentin are components of intermediate filaments in avian erythrocytes. 92:299.
— *See* Nelson, Granger, and Lazarides.
Granger, D. L., and Lehninger, A. L. Sites of inhibition of mitochondrial electron transport in macrophage-injured neoplastic cells. 95:527.
Grant, D. S., Leblond, C. P., Kleinman, H. K., Inoué, S., and Hassell, J. R. The incubation of laminin, collagen IV, and heparan sulfate proteoglycan at 35°C yields basement membrane-like structures. 108:1567.
Grant, G. A. *See* Galvin, Dixit, O'Rourke, Santoro, Grant, and Frazier.
Grant, J. W. *See* Taubman, Grant, and Nadal-Ginard.
— *See* Taubman, Smith, Izumo, Grant, Endo, Andreadis, and Nadal-Ginard.
Grant, M. B. *See* Kwan, Dickson, Freemont, and Grant.
Grant, M. E. *See* Gibson, Schor, and Grant.
Granz, T. *See* Joiner, Granz, Albert, and Rotrosen.
Granzow, C., Kopun, M., and Zimmermann, H.-P. Role of nuclear glycogen synthase and cytoplasmic UDPG pyrophosphorylase in the biosynthesis of nuclear glycogen in HD33 Ehrlich-Lettre ascites tumor cells. 89:475.
Gras, U. *See* Momayezi, Lumpert, Kersken, Gras, Plattner, Krinks, and Klee.
Grasser, W. A. *See* Murphy, Grasser, and Wallis.
— *See* Murphy, Gray, Grasser, and Pollard.
— *See* Rothwell, Grasser, Baker, and Murphy.
— *See* Rothwell, Grasser, and Murphy.
Gratzer, W. B. *See* Pinder and Gratzer.
Graves, T. A. *See* Howe, Mooseker, and Graves.
— *See* Mooseker, Graves, Wharton, Falco, and Howe.
Gray, R. O. *See* Murphy, Gray, Grasser, and Pollard.
Greaser, M. L. *See* Moss, Giulian, and Greaser.
— *See* Wang, Greaser, Schultz, Bulinski, Lin, and Lessard.
Grebenau, R. C. *See* Pemrick and Grebenau.
Greco, J. M. *See* Hickman, Theodorakis, Greco, and Brown.
Greco, R. M. *See* Ouellette, Greco, James, Frederick, Naftilan, and Fallon.
Green, B. R. *See* Sprague, Camm, Green, and Staehelin.
Green, C. R., and Severs, N. J. Gap junction connexon configuration in rapidly frozen myocardium and isolated intercalated disks. 99:453.
Green, H. *See* Banks-Schlegel and Green.
— *See* Watt and Green.
Green, K. J., Geiger, B., Jones, J. C. R., Talian, J. C., and Goldman, R. D. The relationship between intermediate filaments and microfilaments before and during the formation of desmosomes and adherens-type junctions in mouse epidermal keratinocytes. 104:1389.
—, and Kirk, D. L. A revision of the cell lineages recently reported for *Volvox carteri* embryos. 94:741.
—, and Kirk, D. L. Cleavage patterns, cell lineages, and development of a cytoplasmic bridge system in *Volvox* embryos. 91:743.
—, Viamontes, G. I., and Kirk, D. L. Mechanism of formation, ultrastructure, and function of the cytoplasmic bridge system during morphogenesis in *Volvox*. 91:756.
Green, M. R. *See* Couchman, Rees, Green, and Smith.
Green, R., and Shields, D. Somatostatin discriminates between the intracellular pathways of secretory and membrane proteins. 99:97.
Green, R. F., Meiss, H. K., and Rodriguez-Boulan, E. Glycosylation does not determine segregation of viral envelope proteins in the plasma membrane of epithelial cells. 89:230.
Green, S. A., Zimmer, K.-P., Griffiths, G., and Mellman, I. Kinetics of intracellular transport and sorting of lysosomal membrane and plasma membrane proteins. 105:1227.

— *See* Connolly, Green, and Greene.
— *See* Lewis, Green, Marsh, Vihko, Helenius, and Mellman.
Green, S. H., Rydel, R. E., Connolly, J. L., and Greene, L. A. PC12 cell mutants that possess low- but not high-affinity nerve growth factor receptors neither respond to nor internalize nerve growth factor. 102:830.
— *See* Greene, Drexler, Connolly, Rukenstein, and Green.
Green, W. N. *See* Claudio, Paulson, Green, Ross, Hartman, and Hayden.
Greenberg, A. S. *See* Bridgman, Nakajima, Greenberg, and Nakajima.
Greenberg, J. H. *See* Jerdan, Varner, Greenberg, Horn, and Martin.
Greenberg, J. R. *See* Mayrand, Setyono, Greenberg, and Pederson.
Greenberg, M. E., Brackenbury, R., and Edelman, G. M. Changes in the distribution of the 34-kdalton tyrosine kinase substrate during differentiation and maturation of chicken tissues. 98:473.
— *See* Brackenbury, Greenberg, and Edelman.
Greenberg, S. M. *See* Eppler, Bayley, Greenberg, and Schwartz.
— *See* Swanson, Elste, Greenberg, Schwartz, Aldrich, and Furth.
Greenberger, J. S. *See* Newburger, Pagano, Greenberger, Karpas, and Cohen.
Greenberger, L. M., and Pfenninger, K. H. Membrane glycoproteins of the nerve growth cone: diversity and growth regulation of oligosaccharides. 103:1369.
Greenburg, G., and Hay, E. D. Epithelia suspended in collagen gels can lose polarity and express characteristics of migrating mesenchymal cells. 95:333.
Greenburg, S. *See* Di Virgilio, Meyer, Greenburg, and Silverstein.
Greene, L. A., Drexler, S. A., Connolly, J. L., Rukenstein, A., and Green, S. H. Selective inhibition of responses to nerve growth factor and of microtubule-associated protein phosphorylation by activators of adenylate cyclase. 103:1967.
—, **Liem, R. K. H., and Schelanski, M. L.** Regulation of a high molecular weight microtubule-associated protein in PC12 cells by nerve growth factor. 96:76.
— *See* Aletta and Greene.
— *See* Aletta, Lewis, Cowan, and Greene.
— *See* Black, Aletta, and Greene.
— *See* Black and Greene.
— *See* Burstein, Seeley, and Greene.
— *See* Connolly, Green, and Greene.
— *See* Green, Rydel, Connolly, and Greene.
— *See* Leonard, Gorham, Cole, Greene, and Ziff.
— *See* Oppenheimer-Marks and Grinnell.
— *See* Seeley, Rukenstein, Connolly, and Greene.
— *See* Volonté, Rukenstein, Loeb, and Greene.
Greene, R. *See* Bankaitis, Malchorn, Emr, and Greene.
Greenfield, L. *See* McGraw, Greenfield, and Maxfield.
Greengard, P. *See* Bähler, Benfenati, Valtorta, Czernik, and Greengard.
— *See* Benfenati, Bähler, Jahn, and Greengard.
— *See* Benfenati, Greengard, Brunner, and Bähler.
— *See* De Camilli, Cameron, and Greengard.
— *See* De Camilli, Harris, Huttner, and Greengard.
— *See* Huttner, Schiebler, Greengard, and De Camilli.
— *See* Navone, Di Gioia, Jahn, Browning, Greengard, and De Camilli.
— *See* Navone, Jahn, Di Gioia, Stukenbrok, Greengard, and De Camilli.
— *See* Valtorta, Jahn, Fesce, Greengard, and Ceccarelli.
Greenspan, P., Mayer, E. P., and Fowler, S. D. Nile red: a selective fluorescent stain for intracellular lipid droplets. 100:965.
Greenwalt, D. E., and Mather, I. H. Characterization of an apically derived epithelial membrane glycoprotein from bovine milk, which is expressed in capillary endothelia in diverse tissues. 100:397.
Greer, K., Maruta, H., L'Hernault, S. W., and Rosenbaum, J. L. Alpha-tubulin acetylase activity in isolated *Chlamydomonas* flagella. 101:2081.
— *See* Maruta, Greer, and Rosenbaum.
Greggs, R. *See* Decker, Greggs, Duggan, Stubbs, and Horwitz.
— *See* Horwitz, Duggan, Greggs, Decker, and Buck.
Grelling, K. A. *See* Klatte, Kurpakus, Grelling, and Jones.
Grenett, H. E. *See* Otto, Grenett, and Fuller.
Gresham, H. D., Goodwin, J. L., Allen, P. M., Anderson, D. C., and Brown, E. J. A novel member of the integrin receptor family mediates ARG-GLY-ASP–stimulated neutrophil phagocytosis. 108:1935.
Grey, R. D. *See* Gardiner and Grey.
Griepp, E. B., Dolan, W. J., Robbins, E. S., and Sabatini, D. D. Participation of plasma membrane porteins in the formation of tight junctions by cultured epithelial cells. 96:693.
Griffin, C. G., and Letourneau, P. C. Rapid retraction of neurites by sensory neurons in response to increased concentrations of nerve growth factor. 86:156.
Griffin, G. L. *See* Malone, Teitelbaum, Griffin, Senior, and Kahn.
— *See* Mecham, Griffin, Madaras, and Senior.
— *See* Pierce, Mustoe, Lingelbach, Masakowski, Griffin, Senior, and Deuel.
— *See* Senior, Griffin, Mecham, Wrenn, Prasad, and Urry.
— *See* Senior, Griffin, San Huang, Walz, and Deuel.
— *See* Senior, Huang, Griffin, and Deuel.
Griffin, J. W., Price, D. L., Drachman, D. B., and Morris, J. Incorporation of axonally transported glycoproteins into axolemma during nerve regeneration. 88:205.
— *See* Hoffman, Griffin, and Price.
— *See* Hoffman, Thompson, Griffin, and Price.
— *See* Trapp, Quarles, and Griffin.
Griffith, J. M. *See* Stoorvogel, Geuze, Griffith, Schwartz, and Strous.
— *See* Stoorvogel, Geuze, Griffith, and Strous.
Griffith, L. C. *See* Nose, Griffith, and Schulman.
Griffith, L. M., Downs, S. M., and Spudich, J. A. Myosin light chain kinase and myosin light chain phosphatase from *Dictyostelium*: effects of reversible phosphorylation on myosin structure and function. 104:1309.
Griffiths, E. *See* Miller, Griffiths, Lenard, and Firestone.
Griffiths, G., Back, R., and Marsh, M. A quantitative analysis of the endocytic pathway in baby hamster kidney cells. 109:2703.
—, **Brands, R., Burke, B., Louvard, D., and Warren, G.** Viral membrane proteins acquire galactose in *trans* Golgi cisternae during intracellular transport. 95:781.
—, **Fuller, S. D., Back, R., Hollinshead, M., Pfeiffer, S., and Simons, K.** The dynamic nature of the Golgi complex. 108:277.
—, **Pfeiffer, S., Simons, K., and Matlin, K.** Exit of newly synthesized membrane proteins from the *trans* cisterna of the Golgi complex to the plasma membrane. 101:949.
—, **Quinn, P., and Warren G.** Dissection of the Golgi Complex. I. Monensin inhibits the transport of viral membrane proteins from *medial* to *trans* Golgi cisternae in baby hamster kidney cells infected with Semliki Forest virus. 96:835.
—, **Warren, G., Quinn, P., Mathieu-Costello, O., and Hoppeler, H.** Density of newly-synthesized plasma membrane proteins in intracellular membranes. I. Stereological studies. 98:2133.
— *See* Cosson, de Curtis, Pouysségur. Griffiths, and Davoust.
— *See* Featherstone, Griffiths, and Warren.
— *See* Green, Zimmer, Griffiths, and Mellman.
— *See* Gruenberg, Griffiths, and Howell.
— *See* Messner, Griffiths, and Kornfeld.
— *See* Parton, Prydz, Bomsel, Simons, and Griffiths.
— *See* Quinn, Griffiths, and Warren.
— *See* Van Deurs, Sandvig, Petersen, Olsnes, Simons, and Griffiths.
— *See* Warren, Featherstone, Griffiths, and Burke.
Griffiths, S. L., Perkins, R. M., Streuli, C. H., and Critchley, D. R. Variants of BALB/c 3T3 cells lacking complex gangliosides retain a fibronectin matrix and spread normally on fibronectin-coated substrates. 102:469.
Grigoriadis, A. E., Heersche, J. N. M., and Aubin, J. E. Differentiation of muscle, fat, cartilage, and bone from progenitor cells present in a bone-derived clonal cell population: effect of dexamethasone. 106:2139.
Grill, S. M. *See* Gipson, Grill, Spurr, and Brennan.
Grimaldi, A. *See* Gumbiner, Stevenson, and Grimaldi.
Grimaldi, G. *See* Stoppelli, Verde, Grimaldi, Locatelli, and Blasi.
Grimes, G. W., and Gavin, R. H. Ciliary protein conservation during development in the ciliated protozoan, *Oxytricha*. 105:2855.
Grimme, N. *See* Schonfeld, Grimme and Alpers.
Grinnell, F. Fibroblast receptor for cell-substratum adhesion: studies on the interaction of baby hamster kidney cells with latex beads coated by cold insoluble globulin (plasma fibronectin). 86:104.
— Focal adhesion sites and the removal of substratum-bound fibronectin. 103:2697.
—, **Head, J. R., and Hoffpauir, J.** Fibronectin and cell shape in vivo: studies on the endometrium during pregnancy. 94:596.
— *See* Guidry and Grinnell.
— *See* McAbee and Grinnell.
— *See* Oppenheimer-Marks and Grinnell.
— *See* Toda, Taun, Brown, and Grinnell.
Grinstein, S., Cohen, S., Goetz, J. D., and Rothstein, A. Osmotic and phorbol ester-induced activation of Na^+/H^+ exchange: possible role of protein phosphorylation in lymphocyte volume regulation. 101:269.
— *See* Dixon, Stewart, Grinstein, and Spiegel.
Gröbner, P., and Loidl, P. An immunological approach to enrich a mitotic stimulator and to reveal G_2-phase-specific proteins in *Physarum polycephalum*. 100:1930.
Grohovaz, F. *See* Torri-Tarelli, Grohovaz, Fesce, and Ceccarelli.
Grøndahl-Hansen, J. *See* Kristensen, Nielsen, Grøndahl-Hansen, Andresen, Larsson, and Danø.
Groner, B. *See* Reichmann, Ball, Groner, and Friis.
Groppi, V. E. *See* Kaslow, Groppi, Abood, and Bourne.
Gros, F. *See* Denoulet, Filliatreau, de Nechaud, Gros, and Di Giamberardino.

Groschel-Stewart, U. *See* Drenckhahn and Groschel-Stewart.
Gross, C. *See* Schauer, Emr, Gross, and Schekman.
Gross, H. *See* Studer, Moor, and Gross.
Gross, J. *See* Bruns, Press, Engvall, Timpl, and Gross.
— *See* Johnson-Wint and Gross.
— *See* Linsenmayer, Gibney, Fitch, Gross, and Mayne.
Gross, J. L., Moscatelli, D., Jaffe, E. A., and Rifkin, D. B. Plasminogen activator and collagenase production by cultured capillary endothelial cells. 95:975.
Grossi de Sa, M.-F., Martins de Sa, C., Harper, F., Olink-Coux, M., Huesca, M., and Scherrer, K. The association of prosomes with some of the intermediate filament networks of the animal cell. 107:1517.
Grosskopf, E. *See* Putnoky, Grosskopf, Cam Ha, Kiss, and Kondorosi.
Grossman, A. *See* de Hostos, Togasaki, and Grossman.
Grossman, A. R. *See* Schmidt, Barlett, Grossman, Cashmore, and Chua.
Grotendorst, G. *See* Seppä, Grotendorst, Seppä, Schiffmann, and Martin.
Grove, B. K., Cerny, L., Perriard, J.-C., and Eppenberger, H. M. Myomesin and M-protein: expression of two M-band proteins in pectoral muscle and heart during development. 101:1413.
—, Kurer, V., Lehner, C., Doetschman, T. C., Perriard, J.-C., and Eppenberger, H. M. A new 185,000-dalton skeletal muscle M-line protein detected by monoclonal antibodies. 98:517.
Grover, A., Andrews, G., and Adamson, E. D. Role of laminin in epithelium formation by F9 aggregates. 97:137.
—, Oshima, R. G., and Adamson, E. D. Epithelial layer formation in differentiating aggregates of F9 embryonal carcinoma cells. 96:1690.
Groyer-Picard, M.-T. *See* Perrot-Applanat, Groyer-Picard, Logeat, and Milgrom.
Grubb, J. H. *See* Gonzalez-Noriega, Grubb, Talkad, and Sly.
Gruenbaum, Y., Landesman, Y., Drees, B., Bare, J. W., Saumweber, H., Paddy, M., Sedat, J. W., Smith, D. E., Benton, B., and Fisher, P. A. *Drosophila* nuclear lamin precursor Dm_0 is translated from either of two developmentally regulated mRNA species apparently encoded by a single gene. 106:585.
— *See* Hochstrasser, Mathog, Gruenbaum, Saumweber, and Sedat.
— *See* Smith, Gruenbaum, Berrios, and Fisher.
Gruenberg, J., Allred, D. R., and Sherman, I. W. Scanning electron microscope-analysis of the protrusions (knobs) present on the surface of *Plasmodium falciparum*-infected erythrocytes. 97:795.
—, Griffiths, G., and Howell, K. E. Characterization of the early endosome and putative endocytic carrier vesicles in vivo and with an assay of vesicle fusion in vitro. 108:1301.
— *See* Bomsel, Prydz, Parton, Gruenberg, and Simons.
Gruenstein, E. *See* Gelman, Davis, Morris, and Gruenstein.
Gruenstein, E. I. *See* Merkel, Kaneshiro, and Gruenstein.
Gruijters, W. T. M., Kistler, J., Bullivant, S., and Goodenough, D. A. Immunolocalization of MP70 in lens fibers 16–17-nm intercellular junctions. 104:565.
Gruler, H. *See* Bültmann and Gruler.
Grumet, M., and Edelman, G. M. Heterotypic binding between neuronal membrane vesicles and glial cells is mediated by a specific cell adhesion molecule. 98:1746.
—, and Edelman, G. M. Neuron-glia cell adhesion molecule interacts with neurons and astroglia via different binding mechanisms. 106:487.
— *See* Crossin, Hoffman, Grumet, Thiery, and Edelman.
— *See* Daniloff, Levi, Grumet, Rieger, and Edelman.
— *See* Friedlander, Grumet, and Edelman.
— *See* Hoffman, Friedlander, Chuong, Grumet, and Edelman.
— *See* Lin, Dugan Tobin, Grumet, and Lin.
— *See* Reiger, Grumet, and Edelman.
— *See* Rieger, Daniloff, Pinçon-Raymond, Crossin, Grumet, and Edelman.
— *See* Rutishauser, Grumet, and Edelman.
— *See* Thiery, Delouvée, Grumet, and Edelman.
Grund, C. *See* Franke, Grund, and Achtstätter.
— *See* Franke, Heid, Grund, Winter, Freudenstein, Schmid, Jarasch, and Keenan.
— *See* Franke, Kleinschmidt, Spring, Krohne, Grund, Trendelenburg, Stoehr, and Scheer.
— *See* Franke, Schmid, Wellsteed, Grund, Gigi, and Geiger.
— *See* Franke, Winter, Grund, Schmid, Schiller, and Jarasch.
— *See* Lin, Eshleman, Grund, Fischman, Masaki, Franke, and Holtzer.
— *See* Schmid, Schiller, Grund, Stadler, and Franke.
— *See* Wiedenmann, Lawley, Grund, and Branton.
Grunwald, G. B., Geller, R. L., and Lilien, J. Enzymatic dissection of embryonic cell adhesive mechanisms. 85:766.
Grunwald, J. *See* Glukhova, Frid, Shekhonin, Vasilevskaya, Grunwald, Saginati, and Koteliansky.
Grupp, S. A., Lieberman, M. A., and Harmony, J. A. K. Inhibition of lymphocyte proliferation by detergent-solubilized mouse liver membranes. 101:380.
Gu, W., Lewis, S. A., and Cowan, N. J. Generation of antisera that discriminate among mammalian α-tubulins: introduction of specialized isotypes into cultured cells results in their coassembly without disruption of normal microtubule function. 106:2011.
Gu, Y., Ralston, E., Murphy-Erdosh, C., Black, R. A., and Hall, Z. W. Acetylcholine receptor in a C2 muscle cell variant is retained in the endoplasmic reticulum. 109:729.
Guan, J.-L. *See* Solowska, Guan, Marcantonio, Trevithick, Buck, and Hynes.
Gubler, H. U. *See* Gennaro, Dewald, Horisberger, Gubler, and Baggiolini.
Gubler, M. L. *See* McCue, Gubler, Sherman, and Cohen.
Gudas, L. J. *See* Braunhut, Gudas, Kurokawa, Sasse, and D'Amore.
Gudewicz, P. W., Molnar, J., Lai, M. Z., Beezhold, D. W., Siefring, G. E., Jr., Credo, R. B., and Lorand, L. Fibronectin-mediated uptake of gelatin-coated latex particles by peritoneal macrophages. 87:427.
Guenet, J. L. *See* Pfeiffer, Jakob, Mikoshiba, Dubois, Guenet, Nicolas, Gaillard, Chevance, and Jacob.
Guerriero, V. *See* Bourguignon, Nagpal, Balazovich, Guerriero, and Means.
— *See* Simmen, Dunbar, Guerriero, Chafouleas, Clark, and Means.
Guiard, B. *See* Rassow, Guiard, Wienhues, Herzog, Hartl, and Neupert.
Guidry, C., and Grinnell, F. Heparin modulates the organization of hydrated collagen gels and inhibits gel contraction by fibroblasts. 104:1097.
Guilbert, L. J., and Stanley, E. R. Specific interaction of murine colony-stimulating factor with mononuclear phagocytic cells. 85:153.
— *See* Byrne, Guilbert, and Stanley.
Gulati, A. K., Reddi, A. H., and Zalewski, A. A. Changes in the basement membrane zone components during skeletal muscle fiber degeneration and regeneration. 97:957.
Gulik-Krzywicki, T. *See* Morel, Manaranche, Israël, and Gulik-Krzywicki.
— *See* Sperling, Tardieu, and Gulik-Krzywicki.
Gull, K. *See* Burland, Gull, Schedl, Boston, and Dove.
— *See* Sasse, Glyn, Birkett, and Gull.
— *See* Schedl, Burland, Gull, and Dove.
— *See* Schneider, Sherwin, Sasse, Russell, Gull, and Seebeck.
— *See* Sherwin, Schneider, Sasse, Seebeck, and Gull.
Gulley, R. L., and Reese, T. S. Cytoskeletal organization at the postsynaptic complex. 91:298.
Gumbiner, B., and Simons, K. A functional assay for proteins involved in establishing an epithelial occluding barrier: indentification of a uvomorulin-like polypeptide. 102:457.
—, Stevenson, B., and Grimaldi, A. The role of the cell adhesion molecule uvomorulin in the formation and maintenance of the epithelial junctional complex. 107:1575.
— *See* Choi and Gumbiner.
— *See* Finlay, Gumbiner, and Falkow.
— *See* Moore, Gumbiner, and Kelly.
Gumkowski, F. *See* Lightner, Gumkowski, Bigner, and Erickson.
Gundersen, D. *See* Roth, Gundersen, Patil, and Rodriguez-Boulan.
— *See* Salas, Misek, Vega-Salas, Gundersen, Cereijido, and Rodriguez-Boulan.
— *See* Vega-Salas, Salas, Gundersen, and Rodriguez-Boulan.
Gundersen, G. G., and Bulinski, J. C. Distribution of tyrosinolated and nontyrosinolated α-tubulin during mitosis. 102:1118.
—, Khawaja, S., and Bulinski, J. C. Generation of a stable, posttranslationally modified microtubule array is an early event in myogenic differentiation. 109:2275.
—, Khawaja, S., and Bulinski, J. C. Postpolymerization detyrosination of α-tubulin: a mechanism for subcellular differentiation of microtubules. 105:251.
— *See* Geuens, Gundersen, Nuydens, Cornelissen, Bulinski, and De Brabander.
— *See* Khawaja, Gundersen, and Bulinski.
— *See* Webster, Gundersen, Bulinski, and Borisy.
Gundersen, R. W., and Barrett, J. N. Characterization of the turning response of dorsal root neurites toward nerve growth factor. 87:546.
Gunderson, G. G., and Shapiro, B. M. Sperm surface proteins persist after fertilization. 99:1343.
Gunning, B. E. S. *See* Wick, Seagull, Osborn, Weber, and Gunning.
Gunning, P. W., Landreth, G. E., Bothwell, M. A., and Shooter, E. M. Differential and synergistic actions of nerve growth factor and cyclic AMP in PC12 cells. 89:240.
Gunther, S., Alexander, R. W., Atkinson, W. J., and Gimbrone, M. A., Jr. Functional angiotensin II receptors in cultured vascular smooth muscle cells. 92:289.
Guo-Yang, Z. *See* Fisher, Cui, Zhang, Hartman, Grahl, Guo-Yang, Tarpey, and Damsky.
Gupta, P., Rosen, J. M., D'Eustachio, P., and Ruddle, F. H. Localization of the casein gene family to a single mouse chromosome. 93:199.

Gupta, P. K., and Sirover, M. A. Regulation of DNA repair in serum-stimulated xeroderma pigmentosum cells. 99:1275.
Gupta, S. K. *See* Arnaout, Gupta, Pierce, and Tenen.
Gurdon, J. B. *See* Warner and Gurdon.
Gurney, M. E., Apatoff, B. R., and Heinrich, S. P. Suppression of terminal axonal sprouting at the neuromuscular junction by monoclonal antibodies against a muscle-derived antigen of 56,000 daltons. 102:2264.
Gurney, T., Jr., and Eliceiri, G. L. Intracellular distribution of low molecular weight RNA species in HeLa cells. 87:398.
Guroff, G. *See* Huff, End, and Guroff.
— *See* Lazarovici, Dickens, Kuzuya, and Guroff.
Gurofsky, S. *See* Ball, Freitag, and Gurofsky.
Gusse, M., and Chevaillier, P. Electron microscope evidence for the presence of globular structures in different sperm chromatins. 87:280.
Gustafson, E. J., Lukasiewicz, H., Wachtfogel, Y. T., Norton, K. J., Schmaier, A. H., Niewiarowski, S., and Colman, R. W. High molecular weight kininogen inhibits fibrinogen binding to cytoadhesins of neutrophils and platelets. 109:377.
Gustavsson, J. *See* Särndahl, Lindroth, Bengtsson, Fällman, Gustavsson, Stendahl, and Andersson.
Guthrie, B. A., and Wickner, W. Yeast vacuoles fragment when microtubules are disrupted. 107:115.
Guthrie, D. F. *See* Beaven, Guthrie, Moore, Smith, Hesketh, and Metcalfe.
Gutkind, J. S. *See* Notario, Gutkind, Imaizumi, Katamine, and Robbins.
Guy, J., Leclerc, R., and Pelletier, G. Localization of a 16,000-dalton fragment of the common precursor of adrenocorticotropin and β-lipotropin in the rat and human pituitary gland. 86:825.

H

Haak, R. A. *See* Ingraham, Burns, Boxer, Baehner, and Haak.
Haas, C. A., and DeGennaro, L. J. Multiple synapsin I mRNAs are differentially regulated during neuronal development. 106:195.
Haase, W. *See* Eveloff, Haase, and Kinne.
Habener, J. F., Maunus, R., Dee, P. C., and Potts, J. T., Jr. Early events in the cellular formation of proparathyroid hormone. 85:292.
Habenicht, A. J. R. *See* Schmidt, Glomset, Wight, Habenicht, and Ross.
Habig, W. H. *See* Critchley, Nelson, Habig, and Fishman.
Hackenbrock, C. R. *See* Schneider, Höchli, and Hackenbrock.
Hadesman, R. A. *See* Lange, Hadesman, and Steck.
Hadlaczky, G. *See* Nyman, Hallman, Hadlaczky, Pettersson, Sharp, and Ringertz.
Hadley, M. A., Byers, S. W., Suárez-Quian, C. A., Kleinman, H. K., and Dym, M. Extracellular matrix regulates Sertoli cell differentiation, testicular cord formation, and germ cell development in vitro. 101:1511.
Haehnel, W., Ratajczak, R., and Robenek, H. Lateral distribution and diffusion of plastocyanin in chloroplast thylakoids. 108:1397.
Haeuptle, M.-T., Flint, N., Gough, N. M., and Dobberstein, B. A tripartite structure of the signals that determine protein insertion into the endoplasmic reticulum membrane. 108:1227.
—, **Suard, Y. L. M., Bogenmann, E., Reggio, H., Racine, L., and Kraehenbuhl, J.-P.** Effect of cell-shape change on the function and differentiation of rabbit mammary cells in culture. 96:1425.
— *See* Lipp, Flint, Haeuptle, and Dobberstein.
— *See* Suard, Haeuptle, Farinon, and Kraehenbuhl.
Hafeman, D. G., Smith, L. M., Fearon, D. T., and McConnell, H. M. Lipid monolayer-coated solid surfaces do not perturb the lateral motion and distribution of C3b receptors on neutrophils. 94:224.
— *See* Petty, Hafeman, and McConnell.
Haffar, O. K., Aponte, G. W., Bravo, D. A., John, N. J., Hess, R. T., and Firestone, G. L. Glucocorticoid-regulated localization of cell surface glycoproteins in rat hepatoma cells is mediated within the Golgi complex. 106:1463.
—, **Dowbenko, D. J., and Berman, P. W.** Topogenic analysis of the human immunodeficiency virus type 1 envelope glycoprotein, gp160, in microsomal membranes. 107:1677.
Haga, N., Forte, M., Saimi, Y., and Kung, C. Microinjection of cytoplasm as a test of complementation in *Paramecium*. 92:559.
—, **Saimi, Y., Takahashi, M., and Kung, C.** Intra- and interspecific complementation of membrane-inexcitable mutants of *Paramecium*. 97:378.
— *See* Hiwatashi, Haga, and Takahashi.
Hagen, S. J., Kiehart, D. P., Kaiser, D. A., and Pollard, T. D. Characterization of monoclonal antibodies to *Acanthamoeba* myosin-I that cross-react with both myosin-II and low molecular mass nuclear proteins. 103:2121.
Hagen, S. T. *See* McCarthy, Hagen, and Furcht.
Haggerty, J. G. *See* Jackson, Ward, and Haggerty.
Hagiwara, M. *See* Ito, Tanaka, Yoshida, Onoda, Ohta, Hagiwara, Itoh, Ogura, Saito, and Hidaka.
Hagopian, S. S. *See* Wolf, Hagopian, and Ishijima.
— *See* Wolf, Hagopian, Lewis, Voglmayr, and Fairbanks.
Hagstedt, T., Lichtenberg, B., Wille, H., Mandelkow, E.-M., and Mandelkow, E. Tau protein becomes long and stiff upon phosphorylation: correlation between parcrystalline structure and degree of phosphorylation. 109:1643.
Hahn, W. C. *See* Rheinwald, Jorgensen, Hahn, Terpstra, O'Connell, and Plummer.
Haigler, C. H., White, A. R., Brown, R. M., Jr., and Cooper, K. M. Alteration of in vivo cellulose ribbon assembly by carboxymethylcellulose and other cellulose derivatives. 94:64.
Haigler, H. T. *See* Giugni, Braslau, and Haigler.
Haimann, C., Torri-Tarelli, F., Fesce, R., and Ceccarelli, B. Measurement of quantal secretion induced by ouabain and its correlation with depletion of synaptic vesicles. 101:1953.
Haimo, L. T. *See* Rozdzial and Haimo.
— *See* Telzer and Haimo.
Haimovitz, A. *See* Rogelj, Klagsbrun, Atzmon, Kurokawa, Haimovitz, Fuks, and Vlodavsky.
Hainfield, J. F. *See* Steven, Hainfield, Trus, Wall, and Steinert.
— *See* Steven, Hainfield, Wall, and Steer.
— *See* Tooney, Mosesson, Amrani, Hainfield, and Wall.
Haire, M. F. *See* Joyce, Haire, and Palade.
Haire, R. N., Peterson, M. S., and O'Leary, J. J. Mitogen activation induces the enhanced synthesis of two heat-shock proteins in human lymphocytes. 106:883.
Hajek, S. V. *See* Ostlund, Leung, and Hajek.
Hakimi, J. *See* Rosenfeld, Marcantonio, Hakimi, Ort, Atkinson, Sabatini, and Kreibich.
Hakomori, S. *See* Koehler, Nudelman, and Hakomori.
Hakomori, S.-I. *See* Carter, Rauvala, and Hakomori.
— *See* Rauvala, Carter, and Hakomori.
— *See* Rauvala and Hakomori.
Halaban, R., Langdon, R., Birchall, N., Cuono, C., Baird, A., Scott, G., Moellmann, G., and McGuire, J. Basic fibroblast growth factor from human keratinocytes is a natural mitogen for melanocytes. 107:1611.
—, **Pomerantz, S. H., Marshall, S., Lambert, D. T., and Lerner, A. B.** Regulation of tyrosinase in human melanocytes grown in culture. 97:480.
— *See* Dotto, Moellmann, Ghosh, Edwards, and Halaban.
Halban, P. *See* Orci, Halban, Amherdt, Ravazzola, Vassalli, and Perrelet.
— *See* Orci, Ravazzola, Amherdt, Yanaihara, Yanaihara, Halban, Renold, and Perrelet.
Halban, P. A. *See* Rhodes and Halban.
Haldar, K., de Amorim, A. F., and Cross, G. A. M. Transport of fluorescent phospholipid analogues from the erythrocyte membrane to the parasite in *Plasmodium falciparum*–infected cells. 108:2183.
Hale, I. L. *See* Vaughan, Fisher, Bernstein, Hale, Linberg, and Matsumoto.
Halegoua, S. *See* Cremins, Wagner, and Halegoua.
Halfter, W. *See* Mackie, Halfter, and Liverani.
Hall, A. K., and Rutishauser, U. Visualization of neural cell adhesion molecule by electron microscopy. 104:1579.
Hall, A. L., Warren, V., Dharmawardhane, S., and Condeelis, J. Identification of actin nucleation activity and polymerization inhibitor in ameboid cells: their regulation by chemotactic stimulation. 109:2207.
— *See* Wessels, Schroeder, Voss, Hall, Condeelis, and Soll.
Hall, D. E., Frazer, K. A., Hann, B. C., and Reichardt, L. F. Isolation and characterization of a laminin-binding protein from rat and chick muscle. 107:687.
—, **Neugebauer, K. M., and Reichardt, L. F.** Embryonic neural retinal cell response to extracellular matrix proteins: developmental changes and effects of the cell substratum attachment antibody (CSAT). 104:623.
— *See* Clegg, Helder, Hann, Hall, and Reichardt.
Hall, D. J., O'Leary, J. J., and Rosenberg, A. Early synthesis of specific cytoplasmic proteins is correlated with the rate of exit of lymphocytes from the resting state. 99:1814.
Hall, J. E. *See* Zampighi, Hall, Ehring, and Simon.
Hall, K. *See* Mattsson, Enberg, Ruusala, Hall, and Pahlman.
Hall, M. N. *See* Emr, Hall, and Silhavy.
Hall, M. O. *See* Chaitin, Schneider, Hall, and Papermaster.
— *See* Mayerson and Hall.
Hall, N. G. *See* Shur and Hall.
Hall, P. F., Osawa, S., and Thomasson, C. L. A role for calmodulin in the regulation of steroidogenesis. 90:402.
— *See* Osawa, Betz, and Hall.
— *See* Papadopoulos and Hall.
Hall, W. M., and Ganguly, P. Binding of thrombin to cultured human

fibroblasts: Evidence for receptor modulation. 87:601.
—, and Ganguly, P. Differential effect of thrombin on the growth of human fibroblasts. 85:70.
Hall, Z. W., Lubit, B. W., and Schwartz, J. H. Cytoplasmic actin in postsynaptic structures at the neuromuscular junction. 90:789.
— *See* Black, Goldman, Hochschwender, Lindstrom, and Hall.
— *See* Bloch and Hall.
— *See* Gu, Ralston, Murphy-Erdosh, Black, and Hall.
— *See* Ralston and Hall.
— *See* Weinberg, Reiness, and Hall.
Hallett, D. W. *See* Natowicz, Hallett, Frier, Chi, Schlesinger, and Baenziger.
Halligan, B. *See* Earnshaw, Halligan, Cooke, Heck, and Liu.
Halligan, N. *See* Earnshaw, Halligan, Cooke, and Rothfield.
Hallman, H. *See* Nyman, Hallman, Hadlaczky, Pettersson, Sharp, and Ringertz.
Halstead, W. E. *See* Kay, Shah, and Halstead.
Haltiwanger, R. S. *See* Holt, Snow, Senior, Haltiwanger, Gerace, and Hart.
Hamaguchi, Y., Toriyama, M., Sakai, H., and Hiramoto, Y. Distribution of fluorescently labeled tubulin injected into sand dollar eggs from fertilization through cleavage. 100:1262.
— *See* Hiramoto, Hamaguchi, Shoji, Schroeder, Shimoda, and Nakamura.
— *See* Hiramoto, Hamaguchi, Shoji, and Shimoda.
— *See* Mabuchi, Hamaguchi, Kobayashi, Hosoya, Tsukita, and Tsukita.
Hamamoto, S. T. *See* Pitelka, Taggart, and Hamamoto.
Hamati, H. F., Britton, E. L., and Carey, D. J. Inhibition of proteoglycan synthesis alters extracellular matrix deposition, proliferation, and cytoskeletal organization of rat aortic smooth muscle cells in culture. 108:2495.
Hamborg, M. A. *See* Heidemann, Hamborg, Thomas, Song, Lindley, and Chu.
— *See* Heidemann, Landers, and Hamborg.
Hamilton, M. *See* Bergeron, Kotwal, Levine, Bilan, Rachubinski, Hamilton, Shore, and Ghosh.
Hamilton, R. L. *See* Hornick, Hamilton, Spaziani, Enders, and Havel.
Hamkalo, B. A., *See* Hutchison, Langer-Safer, Ward, and Hamkalo.
— *See* Lica, Narayanswami, and Hamkalo.
— *See* Rattner, Saunders, Davie, and Hamkalo.
Hammel, I., Dvorak, A. M., Peters, S. P., Schulman, E. S., Dvorak, H. F., Lichtenstein, L. M., and Galli, S. J. Differences in the volume distributions of human lung mast cell granules and lipid bodies: evidence that the size of these organelles is regulated by distinct mechanisms. 100:1488.
— *See* Dvorak, Hammel, Schulman, Peters, MacGlashan, Schleimer, Newball, Pyne, Dvorak, Lichtenstein, and Galli.
Hammer, J. A. III, Bowers, B., Paterson, B. M., and Korn, E. D. Complete nucleotide sequence and deduced polypeptide sequence of a nonmuscle myosin heavy chain gene from *Acanthamoeba*: evidence of a hinge in the rodlike tail. 105:913.
Hammerman, M. R. *See* Bortz, Rotwein, DeVol, Bechtel, Hansen, and Hammerman.
Hammerschlag, R., Stone, G. C., Bolen, F. A., Lindsey, J. D., and Ellisman, M. H. Evidence that all newly synthesized proteins destined for fast axonal transport pass through the Golgi apparatus. 93:568.
Hammerton, R. W. *See* Nelson and Hammerton.
Hammes, S. R. *See* Estes, Monfalcone, Hammes, Holowka, and Baird.
Hampton, R. Y., and Holz, R. W. Effects of changes in osmolality on the stability and function of cultured chromaffin cells and the possible role of osmotic forces in exocytosis. 96:1082.
Hanafusa, H. *See* Grandori and Hanafusa.
Hanai, K., Kato, H., Matsuhashi, S., Morita, H., Raines, E. W., and Ross, R. Platelet proteins, including platelet-derived growth factor, specifically depress a subset of the multiple components of the response elicited by glutathione in *Hydra*. 104:1675.
Hand, A. R. *See* Mazariegos, Tice, and Hand.
Hand, R. *See* Zannis-Hadjopoulos, Taylor, and Hand.
Handin, R. I. *See* Ewenstein, Warhol, Handin, and Pober.
Handler, J. S. *See* Turner, Thompson, Sariban-Sohraby, and Handler.
Handley, D. A., Arbeeny, C. M., Eder, H. A., and Chien, S. Hepatic binding and internalization of low density lipoprotein-gold conjugates in rats treated with 17 α-ethinylestradiol. 90:778.
Hangen, D. H. *See* Müller, Ignatius, Hangen, and Shooter.
Hanks, S. K., and Rao, P. N. Initiation of DNA synthesis in the prematurely condensed chromosomes of G_1 cells. 87:285.
Hann, B. C., Poritz, M. A., and Walter, P. *Saccharomyces cerevisiae* and *Schizosaccharomyces pombe* contain a homologue to the 54-kD subunit of the signal recognition particle that in *S. cerevisiae* is essential for growth. 109:3223.
— *See* Clegg, Helder, Hann, Hall, and Reichardt.
— *See* Hall, Frazer, Hann, and Reichardt.
Hannestad, K. *See* Earnshaw, Rekvig, and Hannestad.
Hanning, R. *See* McKeown-Longo, Hanning, and Mosher.
Hannink, M., and Donoghue, D. J. Autocrine stimulation by the v-*sis* gene product requires a ligand-receptor interaction at the cell surface. 107:287.
—, and Donoghue, D. J. Cell surface expression of membrane-anchored v-*sis* gene products: glycosylation is not required for cell surface transport. 103:2311.
Hansen, J. G. *See* Larsson, Skriver, Nielsen, Hansen, Kristensen, and Dunø.
Hansen, V. A. *See* Bortz, Rotwein, DeVol, Bechtel, Hansen, and Hammerman.
Hansen, W., and Walter, P. Prepro-carboxypeptidase Y and a truncated form of pre-invertase, but not full-length pre-invertase, can be post-translationally translocated across microsomal vesicle membranes from *Saccharomyces cerevisiae*. 106:1075.
— *See* Ferro-Novick, Hansen, Schauer, and Schekman.
Hansen, W. J. *See* Holcomb, Hansen, Etcheverry, and Scheckman.
Hanspal, M., and Palek, J. Synthesis and assembly of membrane skeletal proteins in mammalian red cell precursors. 105:1417.
Hantaï, D. *See* Festoff, Hantaï, Soria, Thomaïdis, and Soria.
Harada, A. *See* Hirokawa, Sobue, Kanda, Harada, and Yorifuji.
Harada, F. *See* Yahara, Harada, Sekita, Yoshihira, and Natori.
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— *See* Allan, Harborne, Rau, and Gould.
— *See* Allan, Rau, Harborne, and Gould.
Hardeman, E. C., Minty, A., Benton-Vosman, P., Kedes, L., and Blau, H. M. In vivo system for characterizing clonal variation and tissue-specific gene regulatory factors based upon function. 106:1027.
Harding, C., Heuser, J., and Stahl, P. Receptor-mediated endocytosis of transferrin and recycling of the transferrin receptor in rat reticulocytes. 97:329.
Hardingham, T. E. *See* Ratcliffe, Fryer, and Hardingham.
Hardwick, J. M., Shaw, K. E. S., Wills, J. W., and Hunter, E. Amino-terminal deletion mutants of the Rous sarcoma virus glycoprotein do not block signal peptide cleavage but can block intracellular transport. 103:829.
Hardwicke, P. M. D. *See* Castellani and Hardwicke.
— *See* Castellani, Hardwicke, and Franzini-Armstrong.
Hardy, C. *See* Lynch, O'Guin, Hardy, Mak, and Sun.
Harel, E. *See* Chitnis, Harel, Kohorn, Tobin, and Thornber.
— *See* Kohorn, Harel, Chitnis, Thornber, and Tobin.
Harford, J., Wolkoff, A. W., Ashwell, G., and Klausner, R. D. Monensin inhibits intracellular dissociation of asialoglycoproteins from their receptor. 96:1824.
— *See* Wolkoff, Klausner, Ashwell, and Harford.
Harford, J. B. *See* Weissman, Klausner, Rao, and Harford.
Hargreaves, W. R. *See* Fowler, Luna, Hargreaves, Taylor, and Branton.
Haring, H. U., White, M. F., Kahn, C. R., Kasuga, M., and Lauris, V. Abnormality of insulin binding and receptor phosphorylation in an insulin-resistant melanoma cell line. 98:900.
Harlan, J. M., Thompson, P. J., Ross, R. R., and Bowen-Pope, D. F. α-Thrombin induces release of platelet-derived growth factor–like molecule(s) by cultured human endothelial cells. 103:1129.
— *See* Chen, Thiagarajan, Schwartz, Harlan, and Heimark.
Harland, R., and Weintraub, H. Translation of mRNA injected into *Xenopus* oocytes is specifically inhibited by antisense RNA. 101:1094.
Harmony, J. A. K. *See* Grupp, Lieberman, and Harmony.
Harms, E. *See* Marsh, Schmid, Kern, Harms, Male, Mellman, and Helenius.
— *See* Reggio, Bainton, Harms, Coudrier, and Louvard.
Harnik-Ort, V., Prakash, K., Marcantonio, E., Colman, D. R., Rosenfeld, M. G., Adesnik, M., Sabatini, D. D., and Kreibich, G. Isolation and characterization of cDNA clones for rat ribophorin I: complete coding sequence and in vitro synthesis and insertion of the encoded product into endoplasmic reticulum membranes. 104:855.
Harold, F. M. *See* Kropf, Caldwell, Gow, and Harold.
Harper, F. *See* Grossi de Sa, Martins de Sa, Harper, Olink-Coux, Huesca, and Scherrer.
Harper, M. E. *See* Kellems, Harper, and Smith.
Harper, P. A., and Juliano, R. L. Fibronectin-independent adhesion of fibroblasts to the extracellular matrix: Mediation by a high molecular weight membrane glycoprotein. 91:647.
—, and Juliano, R. L. Isolation and characterization of Chinese hamster ovary cell variants defective in adhesion to fibronectin-coated collagen. 87:755.
Harper, R. A. *See* Haverty, Kelly, Hines, Amenta, Watanabe, Harper, Kefalides, and Neilson.
Harper, S. J. *See* Holland, Harper, McVey, and Hogan.
Harpold, M. *See* Salditt-Georgieff, Harpold, Sawicki, Nevins, and Darnell.
Harpst, L. *See* Salisbury, Sanders, and Harpst.

Harpster, M. H. *See* Nelson, Harpster, Mayfield, and Taylor.
Harrach, B. *See* Schmidt, Robenek, Harrach, Glössl, Nolte, Hörmann, Richter, and Kresse.
Harracksingh, C. *See* Horwitz, Chia, Harracksingh, Orlow, Pifko-Hirst, Schneck, Sorbara, Speaker, and Wilk.
Harris, A. K., and Gewalt, S. L. Stimulation testing of mechanisms form inducing the formation of the contractile ring in cytokinesis. 109:2215.
— *See* Dembo and Harris.
Harris, A. L. *See* Spray, Nerbonne, Campos de Carvalho, Harris, and Bennett.
Harris, A. S. *See* Coleman, Harris, Miche, Mooseker, and Morrow.
Harris, C. C. *See* Wakefield, Smith, Masui, Harris, and Sporn.
Harris, J. M. *See* Breitfeld, Harris, and Mostov.
— *See* Mostov, Breitfeld, and Harris.
Harris, K. *See* Stern, Brett, Harris, and Nawroth.
Harris, P., Osborn, M., and Weber, K. Distribution of tubulin-containing structures in the egg of the sea urchin *Strongylocentrotus purpuratus* from fertilization through first cleavage. 84:668.
Harris, R. *See* Salpeter and Harris.
— *See* Salpeter, Marchaterre, and Harris.
Harris, S. M., Jr. *See* De Camilli, Harris, Huttner, and Greengard.
Harrison, J. J., Soudry, E., and Sager, R. Adipocyte conversion of CHEF cells in serum-free medium. 100:429.
Harrison, P. H. *See* Boonstra, Moolenaar, Harrison, Moed, van der Saag, and de Laat.
Harrison, R. L. *See* Ohmori, Fretto, Harrison, Switzer, Erickson, and McKee.
Harrison, S. C. *See* Kirchhausen and Harrison.
— *See* Turkewitz and Harrison.
Harrison, W. *See* Whitson, Harrison, Dunlap, Bowers, Fisher, Robey, and Termine.
Hart, G. W. *See* Bangs, Andrews, Hart, and Englund.
— *See* Holt, Snow, Senior, Haltiwanger, Gerace, and Hart.
— *See* Williams, Swiedler, and Hart.
Hart, I. K., Richardson, W. D., Bolsover, S. R., and Raff, M. C. PDGF and intracellular signaling in the timing of oligodendrocyte differentiation. 109:3411.
Hart, J. T. *See* Barnett, Kretschmer, Austen, Goebel, Hart, Elting, and Kamarck.
Hart, P. D. *See* Geisow, Hart, and Young.
Hart, R. A. *See* Oyler, Higgins, Hart, Battenberg, Billingsley, Bloom, and Wilson.
Hartl, F.-U. *See* Rassow, Guiard, Wienhues, Herzog, Hartl, and Neupert.
Hartman, A. L. *See* Moroi, Hartman, Nakane, and Tan.
Hartman, D. S. *See* Claudio, Paulson, Green, Ross, Hartman, and Hayden.
Hartman, L. *See* Fisher, Cui, Zhang, Hartman, Grahl, Guo-Yang, Tarpey, and Damsky.
Hartmannn, D. J. *See* Tacchetti, Quarto, Nitsch, Hartmann, and Cancedda.
Hartwell, L. H. Mutants of *Saccharomyces cerevisiae* unresponsive to cell division control by polypeptide mating hormone. 85:811.
— *See* Wood and Hartwell.
Hartwig, J. *See* Brown, Gluck, and Hartwig.
— *See* Niederman, Amrein, and Hartwig.
Hartwig, J. H., Chambers, K. A., Hopcia, K. L., and Kwiatkowski, D. J. Association of profilin with filament-free regions of human leukocyte and platelet membranes and reversible membrane binding during platelet activation. 109:1571.
—, Chambers, K. A., and Stossel, T. P. Association of gelsolin with actin filaments and cell membranes of macrophages and platelets. 108:467.
—, and Shevlin, P. The architecture of actin filaments and the ultrastructural location of actin-binding protein in the periphery of lung macrophages. 103:1007.
—, Tyler, J., and Stossel, T. P. Actin-binding protein promotes the bipolar and perpendicular branching of actin filaments. 87:841.
— *See* Stendahl, Hartwig, Brotschi, and Stossel
Hartzell, H. C. Distribution of muscarinic acetylcholine receptors and presynaptic nerve terminals in amphibian heart. 86:6.
—, and Sale, W. S. Structure of C-protein purified from cardiac muscle. 100:208.
Hascall, V. C. *See* Kanwar, Hascall, and Farquhar.
— *See* Kanwar, Hascall, Jakubowski, and Gibbons.
— *See* Wight and Hascall.
Hasegawa, E. *See* Chen, Hasegawa, Hasegawa, Weinstock, and Yamada.
Hasegawa, T. *See* Chen, Hasegawa, Hasegawa, Weinstock, and Yamada.
— *See* Chen, Wang, Hasegawa, Yamada, and Yamada.
— *See* Duband, Nuckolls, Ishihara, Hasegawa, Yamada, Thiery, and Jacobson.
Hashimoto, K. *See* Kaariainen, Hashimoto, Saraste, Virtanen, and Penttinen.
Hashimoto, S. K-252a, a potent protein kinase inhibitor, blocks nerve growth factor–induced neurite outgrowth and changes in the phosphorylation of proteins in PC12h cells. 107:1531.
—, Bruno, B., Lew, D. P., Pozzan, T., Volpe, P., and Meldolesi, J. Immunocytochemistry of calciosomes in liver and pancreas. 107:2523.
—, Fumagalli, G., Zanini, A., and Meldolesi, J. Sorting of three secretory proteins to distinct secretory granules in acidophilic cells of cow anterior pituitary. 105:1579.
Hashimoto, T. *See* Baumgart, Völkl, Hashimoto, and Fahimi.
Hasilik, A. *See* Braulke, Gartung, Hasilik, and von Figura.
— *See* Geuze, Slot, Strous, Hasilik, and von Figura.
— *See* Gieselmann, Pohlmann, Hasilik, and von Figura.
— *See* Lemansky, Hasilik, von Figura, Pelmy, Fishman, Fine, Kedersha, and Rome.
— *See* Schulze-Lohoff, Hasilik, and von Figura.
Haslam, S. Z., and Shyamala, G. Progesterone receptors in normal mammary gland: receptor modulations in relation to differentiation. 86:730.
Hassell, J. R. *See* Grant, Leblond, Kleinman, Inoué, and Hassell.
— *See* Klein, Brown, Oegema, Brenchley, Anderson, Dickinson, Horigan, and Hassell.
— *See* Poole, Pidoux, Reiner, Cöster, and Hassell.
Hastings, J. W. *See* Johnson, Inoué, Flint, and Hastings.
— *See* Nicolas, Nicolas, Johnson, Bassot, and Hastings.
Haston, W. S., Shields, J. M., and Wilkinson, P. C. Lymphocyte locomotion and attachment on two-dimensional surfaces and three-dimensional matrices. 92:747.
Hasty, D. L. *See* Donaldson, Mahan, Hasty, McCarthy, and Furcht.
Hasu, M., *See* Ghinea, Fixman, Alexandru, Popov, Hasu, Ghitescu, Eskenasy, Simionescu, and Simionescu.
Hatano, S. *See* Ishigami, Kuroda, and Hatano.
— *See* Ozaki and Hatano.
Hatchell, D. *See* Tseng, Hatchell, Tierney, Huang, and Sun.
Hatfield, J. S., Skoff, R. P., Maisel, H., and Eng, L. Glial fibrillary acidic protein is localized in the lens epithelium. 98:1895.
Hatta, K., Nose, A., Nagafuchi, A., and Takeichi, M. Cloning and expression of cDNA encoding a neural calcium-dependent cell adhesion molecule: its identity in the cadherin gene family. 106:873.
— *See* Duband, Dufour, Hatta, Takeichi, Edelman, and Thiery.
— *See* Hirano, Nose, Hatta, Kawakami, and Takeichi.
Hatten, M. E. Cell assembly patterns of embryonic mouse cerebellar cells on carbohydrate-derivatized polylysine culture substrata. 89:54.
— Neuronal inhibition of astroglial cell proliferation is membrane mediated. 104:1353.
— Neuronal regulation of astroglial morphology and proliferation in vitro. 100:384.
—, and Liem, R. K. Astroglial cells provide a template for the positioning of developing cerebellar neurons in vitro. 90:622.
—, Liem, R. K. H., and Mason, C. A. Two forms of cerebellar glial cells interact differently with neurons in vitro. 98:193.
— *See* Edmondson, Liem, Kuster, and Hatten.
Hatzfeld, J., Miskin, R., and Reich, E. Acetylcholine receptor: effects of proteolysis on receptor metabolism. 92:176.
Hatzfeld, M., and Franke, W. W. Pair formation and promiscuity of cytokeratins: formation in vitro of heterotypic complexes and intermediate-sized filaments by homologous and heterologous recombinations of purified polypeptides. 101:1826.
— *See* Knapp, Franke, Heid, Hatzfeld, Jorcano, and Moll.
Haugli, F., Andreassen, R., and Funderud, S. DNA replication in *Physarum polycephalum*: electron microscopic analysis of patterns of DNA replication in the presence of cycloheximide. 95:323.
Hauptman, P. J. *See* Liscum, Hauptman, Hood, and Holtzman.
Hauri, H. P. *See* Schweizer, Fransen, Bächi, Ginsel, and Hauri.
Hauri, H.-P., Sterchi, E. E., Bienz, D., Fransen, J. A. M., and Marxer, A. Expression and intracellular transport of microvillus membrane hydrolases in human intestinal epithelial cells. 101:838.
— *See* Eilers, Klumperman, and Hauri.
— *See* Gorr, Stieger, Fransen, Kedinger, Marxer, and Hauri.
— *See* Marxer, Stieger, Quaroni, Kashgarian, and Hauri.
— *See* Stieger, Matter, Baur, Bucher, Höchli, and Hauri.
Hauschka, S. D. *See* Clegg and Hauschka.
— *See* Clegg, Linkhart, Olwin, and Hauschka.
— *See* Lim and Hauschka.
— *See* Olwin and Hauschka.
Hausen, P. *See* Krohne, Stick, Kleinschmidt, Moll, Franke, and Hausen.
— *See* Zimmer, Dreyer, and Hausen.
Hauser, K. *See* Matus, Ng, Pehling, Ackerann, and Hauser.
Haussler, M. R. *See* Mangelsdorf, Koeffler, Donaldson, Pike, and Haussler.
Havaranis, A. *See* O'Loughlin, Lehr, Havaranis, and Heywood.
Havel, R. J. *See* Hornick, Hamilton, Spaziani, Enders, and Havel.
Havercroft, J. C., and Cleveland, D. W. Programmed expression of

β-tubulin genes during development and differentiation of the chicken. 99:1927.
— *See* Cleveland and Havercroft.
Haverstick, D. M., and Glaser, M. Visualization of domain formation in the inner and outer leaflets of a phospholipid bilayer. 106:1885.
Haverty, T. P., Kelly, C. J., Hines, W. H., Amenta, P. S., Watanabe, M., Harper, R. A., Kefalides, N. A., and Neilson, E. G. Characterization of a renal tubular epithelial cell line which secretes the autologous target antigen of autoimmune experimental interstitial nephritis. 107:1359.
Hawrylyshyn, B. *See* Wrana, Maeno, Hawrylyshyn, Yao, Domenicucci, and Sodek.
Hay, E. D. *See* Greenburg and Hay.
— *See* Sugrue and Hay.
— *See* Tomasek and Hay.
— *See* Zuk, Matlin, and Hay.
Hayashi, K. *See* Hayashi, Ninomiya, Parsons, Hayashi, Olsen, and Trelstad.
— *See* Matsuda, Saito, Yamaguchi, Koseki, and Hayashi.
Hayashi, M., Ninomiya, Y., Parsons, J., Hayashi, K., Olsen, B. R., and Trelstad, R. L. Differential localization of mRNAs of collagen types I and II in chick fibroblasts, chondrocytes, and corneal cells by in situ hybridization using cDNA probes. 102:2301.
— *See* Katow and Hayashi.
Hayden, D. *See* Claudio, Paulson, Green, Ross, Hartman, and Hayden.
Hayden, J. H., and Allen, R. D. Detection of single microtubules in living cells: particle transport can occur in both directions along the same microtubule. 99:1785.
— *See* Allen, Weiss, Hayden, Brown, Fujiwake, and Simpson.
Hayden, J. M. *See* Burgess, Broschat, and Hayden.
Haye, K. R. *See* Kaufman, Foster, Haye, and Faiman.
Hayes, A. *See* Blum, Hayes, Jamieson, and Vanaman.
Haylett, T., and Thilo, L. Limited and selected transfer of plasma membrane glycoproteins to membrane of secondary lysosomes. 103:1249.
Hayman, E. G., Engvall, E., A'Hearn, E., Barnes, D., Pierschbacher, M., and Ruoslahti, E. Cell attachment on replicas of SDS polyacrylamide gels reveals two adhesive plasma proteins. 95:20.
—, **Engvall, E., and Ruoslahti, E.** Concomitant loss of cell surface fibronectin and laminin from transformed rat kidney cells. 88:352.
—, **Oldberg, Å., Martin, G. R., and Ruoslahti, E.** Codistribution of heparan sulfate proteoglycan, laminin, and fibronectin in the extracellular matrix of normal rat kidney cells and their coordinate absence in transformed cells. 94:28.
—, **Pierschbacher, M. D., and Ruoslahti, E.** Detachment of cells from culture substrate by soluble fibronectin peptides. 100:1948.
Hays, R. M., Bourguet, J., Satir, B. H., Franki, N., and Rapoport, J. Retention of antidiuretic hormone-induced particle aggregates by luminal membranes separated from toad bladder epithelial cells. 92:237.
— *See* Rapoport, Kachadorian, Muller, Franki, and Hays.
Hays, T. *See* Salmon, McKeel, and Hays.
Hays, T. S., Wise, D., and Salmon, E. D. Traction force on a kinetochore at metaphase acts as a linear function of kinetochore fiber length. 93:374.
— *See* Nicklas, Kubai, and Hays.
Hayward, L. J., and Schwartz, R. J. Sequential expression of chicken actin genes during myogenesis. 102:1485.
—, **Zhu, Y. Y., and Schwartz, R. J.** Cellular localization of muscle and nonmuscle actin mRNAs in chicken primary myogenic cultures: the induction of α-skeletal actin mRNA is regulated independently of α-cardiac actin gene expression. 106:2077.
Haywood, P. L. *See* Springer, Haywood, and Barondes.
Haywood-Reid, P. L. *See* Barondes, Cooper, and Haywood-Reid.
— *See* Barondes and Haywood-Reid.
— *See* Barondes, Haywood-Reid, and Cooper.
— *See* Bols, Roberson, Haywood-Reid, Cerra, and Barondes.
— *See* Cerra, Haywood-Reid, and Barondes.
Hazan, R. *See* Hügle, Hazan, Scheer, and Franke.
— *See* Scheer, Hügle, Hazan, and Rose.
Hazuda, D. J. *See* Young, Hazuda, and Simon.
He, H.-T., Finne, J., and Goridis, C. Biosynthesis, membrane association, and release of N-CAM-120, a phosphatidylinositol-linked form of the neural cell adhesion molecule. 105:2489.
Head, J. F. *See* Stommel, Stephens, Masure, and Head.
Head, J. R. *See* Grinnell, Head, and Hoffpauir.
Heaps, J. *See* Zirkin, Chang, and Heaps.
Hearing, J., Gething, M.-J., and Sambrook, J. Addition of truncated oligosaccharides to influenza virus hemagglutinin results in its temperature-conditional cell-surface expression. 108:355.
—, **Hunter, E., Rodgers, L., Gething, M.-J., and Sambrook, J.** Isolation of Chinese hamster ovary cell lines temperature conditional for the cell-surface expression of integral membrane glycoproteins. 108:339.
Heasman, J. *See* Colman, Jones, and Heasman.
Heath, I. B. Behavior of kinetochores during mitosis in the fungus *Saprolegnia ferax*. 84:531.
— *See* Meyer, Kaminskyj, and Heath.
Heath, J., Bell, S., and Rees, A. R. Appearance of functional insulin receptors during the differentiation of embryonal carcinoma cells. 91:293.
Heath, J. K. *See* Nomura, Wills, Edwards, Heath, and Hogan.
Heath, J. P. *See* Capetanaki, Smith, and Heath.
Heathcote, J. G., Bruns, R. R., and Orkin, R. W. Biosynthesis of sulphated macromolecules by rabbit lens epithelium. II. Relationship to basement membrane formation. 99:861.
—, **and Orkin, R. W.** Biosynthesis of sulphated macromolecules by rabbit lens epithelium. I. Identification of the major macromolecules synthesized by lens epithelial cells in vitro. 99:852.
Hébert, C. A., and Baker, J. B. Linkage of extracellular plasminogen activator to the fibroblast cytoskeleton: colocalization of cell surface urokinase with vinculin. 106:1241.
Hecht, N. B. *See* Mali, Sandberg, Vuorio, Yelick, Hecht, and Parvinen.
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Heck, L. W. *See* Abrahamson, Irwin, St. John, Perry, Accavitti, Heck, and Couchman.
Heck, M. M. S., and Earnshaw, W. C. Topoisomerase II: a specific marker for cell proliferation. 103:2569.
— *See* Cooke, Heck, and Earnshaw.
— *See* Earnshaw, Halligan, Cooke, Heck, and Liu.
— *See* Earnshaw and Heck.
Hedges, B. E. *See* Sargent, Hedges, Tsavaler, Clemmons, Tzartos, and Lindstrom.
Hedin, U., Bottger, B. A., Forsberg, E., Johansson, S., and Thyberg, J. Diverse effects of fibronectin and laminin on phenotypic properties of cultured arterial smooth muscles cells. 107:307.
— *See* Sjölund, Hedin, Sejersen, Heldin, and Thyberg.
Hedman, K., Christner, J., Julkunen, I., and Vaheri, A. Chondroitin sulfate at the plasma membranes of cultured fibroblasts. 97:1288.
— *See* Pöllänen, Hedman, Nielsen, Danø, and Vaheri.
Heersche, J. N. M. *See* Aubin, Heersche, Merrilees, and Sodek.
— *See* Beertsen, Heersche, and Aubin.
— *See* Grigoriadis, Heersche, and Aubin.
Hegmann, T. E., Lin, J. L.-C., and Lin, J. J.-C. Motility-dependence of the heterogenous staining of culture cells by a monoclonal anti-tropomyosin antibody. 106:385.
—, **Lin, J. L.-C., and Lin, J. J.-C.** Probing the role of nonmuscle tropomyosin isoforms in intracellular granule movement by microinjection of monoclonal antibodies. 109:1141.
— *See* Lin, Hegmann, and Lin.
Heid, H. *See* Knapp, Franke, Heid, Hatzfeld, Jorcano, and Moll.
Heid, H. W. *See* Franke, Heid, Grund, Winter, Freudenstein, Schmid, Jarasch, and Keenan.
Heidaran, M. A., Showman, R. M., and Kistler, W. S. A cytochemical study of the transcriptional and translational regulation of nuclear transition protein 1 (TP1), a major chromosomal protein of mammalian spermatids. 106:1427.
Heidemann, S. R., Hamborg, M. A., Thomas, S. J., Song, B., Lindley, S., and Chu, D. Spatial organization of axonal microtubules. 99:1289.
—, **Joshi, H. C., Shechter, A., Fletcher, J. R., and Bothwell, M.** Synergistic effects of cyclic AMP and nerve growth factor on neurite outgrowth and microtubule stability of PC12 cells. 100:916.
—, **Landers, J. M., and Hamborg, M. A.** Polarity orientation of axonal microtubules. 91:661.
—, **Zieve, G. W., and McIntosh, J. R.** Evidence for microtubule subunit addition to the distal end of mitotic structures in vitro. 87:152.
— *See* Baas and Heidemann.
— *See* Dennerll, Joshi, Steel, Buxbaum, and Heidemann.
— *See* Dennerll, Lamoureux, Buxbaum, and Heidemann.
— *See* Joshi, Chu, Buxbaum, and Heidemann.
— *See* Zieve, Heidemann, and McIntosh.
Heidrich, H. G. *See* Vandewalle, Köpfer-Hobelsberger, and Heidrich.
Heimark, R. L., and Schwartz, S. M. The role of membrane-membrane interactions in the regulation of endothelial cell growth. 100:1934.
— *See* Chen, Thiagarajan, Schwartz, Harlan, and Heimark.
Hein, A. *See* Caulfield, Lewis, Hein, and Austen.
— *See* Peattie, Alonso, Hein, and Caulfield.
Heine, U. I., Munoz, E. F., Flanders, K. C., Ellingsworth, L. R., Lam, H.-Y., P., Thompson, N. L., Roberts, A. B., and Sporn, M. B. The role of transforming growth factor-beta in the development of the mouse embryo. 105:2861.
Heingård, D. *See* Oldberg, Jirskog-Hed, Axelsson, and Heingård.
Heinrich, S. P. *See* Gurney, Apatoff, and Heinrich.
Heintz, N. *See* Kaczmarek, Calabretta, Kao, Heintz, Nevins, and Baserga.

Heiple, J. M., and Taylor, D. L. Intracellular pH in single motile cells. 86:885.
—, **and Taylor, D. L.** pH changes in pinosomes and phagosomes in the ameba, *Chaos carolinensis*. 94:143.
— *See* Borregaard, Heiple, Simons, and Clark.
— *See* Taylor, Wang, and Heiple.
Heizmann, C. W. *See* Strehler, Pelloni, Heizmann, and Eppenberger.
Helder, J. C. *See* Clegg, Helder, Hann, Hall, and Reichardt.
Heldin, C.-H. *See* Sjölund, Hedin, Sejersen, Heldin, and Thyberg.
— *See* Terracio, Rönnstrand, Tingström, Rubin, Claesson-Welsh, Funa, and Heldin.
Helenius, A., Kartenbeck, J., Simons, K., and Fries, E. On the entry of Semliki Forest virus into BHK-21 cells. 84:404.
— *See* Boulay, Doms, Webster, and Helenius.
— *See* Copeland, Doms, Bolzau, Webster, and Helenius.
— *See* Doms, Keller, Helenius, and Balch.
— *See* Doms, Ruusala, Machamer, Helenius, Helenius, and Rose.
— *See* Doxsey, Sambrook, Helenius, and White.
— *See* Froshauer, Kartenbeck, and Helenius.
— *See* Hurtley, Bole, Hoover-Litty, Helenius, and Copeland.
— *See* Kartenbeck, Stuekenbrok, and Helenius.
— *See* Kielian and Helenius.
— *See* Kielian, Keränen, Kääriäinen, and Helenius.
— *See* Lewis, Green, Marsh, Vihko, Helenius, and Mellman.
— *See* Marsh, Bolzau, White, and Helenius.
— *See* Marsh, Schmid, Kern, Harms, Male, Mellman, and Helenius.
— *See* Matlin, Reggio, Helenius, and Simons.
— *See* Schmid, Fuchs, Kielian, Helenius, and Mellman.
— *See* White, Kartenbeck, and Helenius.
— *See* White, Matlin, and Helenius.
Helenius, J. *See* Doms, Ruusala, Machamer, Helenius, Helenius, and Rose.
Helfman, D. M. *See* Lin, Helfman, Hughes, and Chou.
Helfrich, M. *See* Davies, Warwick, Totty, Philp, Helfrich, and Horton.
Helle, O. *See* Mauch, van der Mark, Helle, Mollenhauer, Pfaffle, and Krieg.
Hellström, I. *See* Garrigues, Lark, Lara, Hellström, Hellström, and Wight.
Hellström, K. E. *See* Garrigues, Lark, Lara, Hellström, Hellström, and Wight.
Helm, R. M. *See* Jung, Helm, Carothers Carraway, and Carraway.
Helmy, S. *See* Lemansky, Hasilik, von Figura, Helmy, Fishman, Fine, Kedersha, and Rome.
Heltianu, C., Simionescu, M., and Simionescu, N. Histamine receptors of the microvascular endothelium revealed *in situ* with a histamine-ferritin conjugate: characteristic high-affinity binding sites in venules. 93:357.
Hembry, R. M. *See* Werb, Hembry, Murphy, and Aggeler.
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Henchman, S. K. *See* Giebelhaus, Zelus, Henchman, and Moon.
Henderik, J. B. *See* Pieper, Schaart, Krimpenfort, Henderik, Moshage, van de Kemp, Ramaekers, Berns, and Bloemendal.
Hendershot, L., Bole, D., Köhler, G., and Kearney, J. F. Assembly and secretion of heavy chains that do not associate posttranslationally with immunoglobulin heavy chain–binding protein. 104:761.
Hendershot, L. M. *See* Bole, Hendershot, and Kearney.
Henderson, E. J. *See* Prem Das and Henderson.
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— *See* Sztul, Hendrick, Kraus, Wall, Kalousek, and Rosenberg.
Hendry, K. A. K. *See* Tucker, Mathews, Hendry, Mackie, and Roche.
Henneberry, J. *See* Gallagher, Henneberry, Wilson, Sambrook, and Gething.
Hennessy, S. W., Frazier, B. A., Kim, D. D., Deckwerth, T. L., Baumgartel, D. M., Rotwein, P., and Frazier, W. A. Complete thrombospondin mRNA sequence includes potential regulatory sites in the 3′ untranslated region. 108:729.
Hennig, B. *See* Schmidt, Hennig, Zimmermann, and Neupert.
Henry, L. *See* Trybus and Henry.
Henry, R. W. *See* Rifas, Uitto, Memoli, Kuettner, Henry, and Peck.
Henry, S. M., and Hodge, L. D. Evidence for a unique profile of phosphatidylcholine synthesis in late mitotic cells. 97:166.
Henshaw, E. C. *See* Kumar, Wolfman, Panniers, and Henshaw.
Henson, J. H., Begg, D. A., Beaulieu, S. M., Fishkind, D. J., Bonder, E. M., Terasaki, M., Lebeche, D., and Kaminer, B. A calsequestrin-like protein in the endoplasmic reticulum of the sea urchin: localization and dynamics in the egg and first cell cycle embryo. 109:149.
— *See* Enders, Henson, and Millette.
Henson, P. M. *See* Riches and Henson.
Hepler, P. K. Calcium restriction prolongs metaphase in dividing *Tradescantia* stamen hair cells. 100:1363.
— Calcium transients during mitosis: observations in flux. 109:2567.
— Membranes in the mitotic apparatus of barley cells. 86:490.
—, **and Callaham, D. A.** Free calcium increases during anaphase in stamen hair cells of *Tradescantia*. 105:2137.
—, **and Palevitz, B. A.** Metabolic inhibitors block anaphase A in vivo. 102:1995.
— *See* Wick and Hepler.
— *See* Wolniak, Hepler, and Jackson.
Herbert, S. H. *See* Gonatas, Stieber, Hickey, Herbert, and Gonatas.
Herbert, T.-J. *See* Lind, Janmey, Chaponnier, Herbert, and Stossel.
Herbst, T. J., McCarthy, J. B., Tsilibary, E. C., and Furcht, L. T. Differential effects of laminin, intact type IV collagen, and specific domains of type IV collagen on endothelial cell adhesion and migration. 106:1365.
Heremans, A., Van Der Schueren, B., De Cock, B., Paulsson, M., Cassiman, J.-J., Van Den Berghe, H., and David, G. Matrix-associated heparan sulfate proteoglycan: core protein–specific monoclonal antibodies decorate the pericellular matrix of connective tissue cells and the stromal side of basement membranes. 109:3199.
— *See* David, Lories, Heremans, Van Der Schueren, Cassiman, and Van Den Berghe.
Heriot, K., Gambetti, P., and Lasek, R. J. Proteins transported in slow components A and B of axonal transport are distributed differently in the transverse plane of the axon. 100:1167.
— *See* Brady, Tytell, Heriot, and Lasek.
Herlands, L., Allfrey, V. G., and Poccia, D. Translational regulation of histone synthesis in the sea urchin *Strongylocentrotus purpuratus*. 94:219.
— *See* Salik, Herlands, Hoffmann, and Poccia.
Herman, B., and Albertini, D. F. A time-lapse video image intensification analysis of cytoplasmic organelle movements during endosome translocation. 98:565.
—, **and Pledger, W. J.** Platelet-derived growth factor-induced alterations in vinculin and actin distribution in BALB/c-3T3 cells. 100:1031.
— *See* O'Keefe, Briggaman, and Herman.
— *See* Prpic, Uhing, Weiel, Jakoi, Gawdi, Herman, and Adams.
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Herman, I. M., Brant, A. M., Warty, V. S., Bonaccorso, J., Klein, E. C., Kormos, R. L., and Borovetz, H. S. Hemodynamics and the vascular endothelial cytoskeleton. 105:291.
—, **Crisona, N. J., and Pollard, T. D.** Relation between cell activity and the distribution of cytoplasmic actin and myosin. 90:84.
—, **and D'Amore, P. A.** Microvascular pericytes contain muscle and nonmuscle actins. 101:43.
—, **and Pollard, T. D.** Electron microscopic localization of cytoplasmic myosin with ferritin-labeled antibodies. 88:346.
— *See* DeNofrio, Hoock, and Herman.
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Herrera, V. L. M., Emanuel, J. R., Ruiz-Opazo, N., Levenson, R., and Nadal-Ginard, B. Three differentially expressed Na, K-ATPase α subunit isoforms: structural and functional implications. 105:1855.
Herrin, D. L., Michaels, A. S., and Paul, A.-L. Regulation of genes encoding the large subunit of ribulose-1,5-bisphosphate carboxylase and the photosystem II polypeptides D-1 and D-2 during the cell cycle of *Chlamydomonas reinhardtii*. 103:1837.
— *See* Jensen, Herrin, Plumley, and Schmidt.
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— *See* Bierer, Herrmann, Brown, Burakoff, and Golan.
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Herschman, H. R. *See* Goodman, Slater, and Herschman.
Hershey, J. W. B. *See* Duncan and Hershey.
Hertel, C., and Staehelin, M. Reappearance of β-adrenergic receptors after isoproterenol treatment in intact C6-cells. 97:1538.
Herth, W. Calcofluor white and congo red inhibit chitin microfibril assembly of *Poterioochromonas*: Evidence for a gap between polymerization and microfibril formation. 87:442.
Hertzberg, E. *See* Spray, Fujita, Saez, Choi, Watanabe, Hertzberg, Rosenberg, and Reid.
Hertzberg, E. L., Anderson, D. J., Friedlander, M., and Gilula, N. B. Comparative analysis of the major polypeptides from liver gap junctions and lens fiber junctions. 92:53.
Hervé, G. *See* Nagy, Laporte, Penverne, and Hervé.
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Herzig, M. A. *See* Cheresh, Pierschbacher, Herzig, and Mujoo.
Herzlinger, D. A., Easton, T. G., and Ojakian, G. K. The MDCK epithelial cell line expresses a cell surface antigen of the kidney distal tubule. 93:269.

—, **and Ojakian, G. K.** Studies on the development and maintenance of epithelial cell surface polarity with monoclonal antibodies. 98:1777.
Herzog, V. Transcytosis in thyroid follicle cells. 97:607.
— *See* Rassow, Guiard, Wienhues, Herzog, Hartl, and Neupert.
— *See* Schwaiger, Herzog, and Neupert.
Hesketh, T. R., Beaven, M. A., Rogers, J., Burke, B., and Warren, G. B. Stimulated release of histamine by a rat mast cell line is inhibited during mitosis. 98:2250.
— *See* Beaven, Guthrie, Moore, Smith, Hesketh, and Metcalfe.
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Hessle, H. *See* Engvall, Hessle, and Klier.
Heumann, R., Korsching, S., Bandtlow, C., and Thoenen, H. Changes of nerve growth factor synthesis in nonneuronal cells in response to sciatic nerve transection. 104:1623.
Heuser, J. Changes in lysosomme shape and distribution correlated with changes in cytoplasmic pH. 108:855.
— Effects of cytoplasmic acidification on clathrin lattice morphology. 108:401.
— Three-dimensional visualization of coated vesicle formation in fibroblasts. 84:560.
—, **and Steer, C. J.** Trimeric binding of the 70-kD uncoating ATPase to the vertices of clathrin triskelia: a candidate intermediate in the vesicle uncoating reaction. 109:1457.
— *See* Chandler and Heuser.
— *See* Collier, Heuser, Levy, and Schlesinger.
— *See* Harding, Heuser, and Stahl.
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—, **and Anderson, R. G. W.** Hypertonic media inhibit receptor-mediated endocytosis by blocking clathrin-coated pit formation. 108:389.
—, **and Keen, J.** Deep-etch visualization of proteins involved in clathrin assembly. 107:877.
—, **Keen, J. H., Amende, L. M., Lippoldt, R. E., and Prasad, K.** Deep-etch visualization of 27S clathrin: a tetrahedral tetramer. 105:1999.
—, **and Kirschner, M. W.** Filament organization revealed in platinum replicas of freeze-dried cytoskeletons. 86:212.
—, **and Reese, T. S.** Structural changes after transmitter release at the frog neuromuscular junction. 88:564.
— *See* Adair, Steinmetz, Mattson, Goodenough, and Heuser.
— *See* Chandler and Heuser.
— *See* Goodenough, Adair, Collin-Osdoby, and Heuser.
— *See* Goodenough, Gebhart, Mecham, and Heuser.
— *See* Goodenough and Heuser.
— *See* Hirokawa and Heuser.
— *See* Hirokawa, Tilney, Fujiwara, and Heuser.
— *See* Klymkowsky, Heuser, and Stroud.
— *See* Miller and Heuser.
— *See* Mooseker, Conzelman, Coleman, Heuser, and Sheetz.
— *See* Roof and Heuser.
— *See* Roof, Korenbrot, and Heuser.
— *See* Sale, Goodenough, and Heuser.
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— *See* O'Loughlin, Lehr, Havaranis, and Heywood.
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Hickey, W. F. *See* Gonatas, Stieber, Hickey, Herbert, and Gonatas.
Hickman, S., Theodorakis, J. L., Greco, J. M., and Brown, P. H. Processing of MOPC 315 immunoglobulin A oligosaccharides: evidence for endoplasmic reticulum and *trans* Golgi α1,2-mannosidase activity. 98:407.
Hidaka, H. *See* Ito, Tanaka, Yoshida, Onoda, Ohta, Hagiwara, Itoh, Ogura, Saito, and Hidaka.
— *See* Tash, Hidaka, and Means.
Hiebert, S. W., and Lamb, R. A. Cell surface expression of glycosylated, nonglycosylated, and truncated forms of a cytoplasmic protein pyruvate kinase. 107:865.
Hiebsch, R. R. *See* Murphy, Hiebsch, and Wallis.
— *See* Murphy, Wallis, and Hiebsch.
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— *See* Tsukita, Hieda, and Tsukita.
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— Unidirectional sliding of myosin filaments along the bundle of F-actin filaments spontaneously formed during superprecipitation. 101:2335.
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Higgins, L. S., and Berg, D. K. Cyclic AMP-dependent mechanism regulates acetylcholine receptor function on bovine adrenal chromaffin cells and discriminates between new and old receptors. 107:1157.
—, **and Berg, D. K.** Metabolic stability and antigenic modulation of nicotinic acetylcholine receptors on bovine adrenal chromaffin cells. 107:1147.
Higgins, T. J. V. *See* Chrispeels, Higgins, Craig, and Spencer.
— *See* Chrispeels, Higgins, and Spencer.
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— *See* Maruyama, Yoshioka, Higuchi, Ohashi, Kimura, and Natori.
Hill, A. *See* Bloom, Amaya, Carbon, Clarke, Hill, and Yeh.
Hill, A. M. *See* Geuens, Hill, Levilliers, Adoutte, and De Brabander.
Hill, C., and Weber, K. Monoclonal antibodies distinguish titins from heart and skeletal muscle. 102:1099.
Hill, C. S., Duran, S., Lin, Z., Weber, K., and Holtzer, H. Titin and myosin, but not desmin, are linked during myofibrillogenesis in postmitotic mononucleated myoblasts. 103:2185.
Hill, D. F. *See* Kedersha, Hill, Kronquist, and Rome.
Hill, K. E. *See* Davidson, Klagsbrun, Hill, Buckley, Sullivan, Brewer, and Woodward.
Hill, R. E. *See* Baumann, Hill, Sauder, and Jahreis.
Hill, R. J., Mott, M. R., Burnett, E. J., Abmayr, S. M., Lowenhaupt, K., and Elgin, S. C. R. Nucleosome repeat structure is present in native salivary chromosomes of *Drosophila melanogaster*. 95:262.
Hille, A. *See* Rosa, Hille, Lee, Zanini, De Camilli, and Huttner.
Hiller, S. *See* Chung, Alavi, Livingston, Hiller, and Taub.
Hinek, A., Reiner, A., and Poole, A. R. The calcification of cartilage matrix in chondrocyte culture: studies of the C-propeptide of type II collagen (chondrocalcin). 104:1435.
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Hino, Y. *See* Brands, Snider, Hino, Park, Gelboin, and Rothman.
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Hirabayashi, K. *See* Gospodarowicz, Hirabayashi, Giguere, and Tauber.
Hirai, M., Gamou, S., Minoshima, S., and Shimizu, N. Two independent mechanisms for escaping epidermal growth factor–mediated growth inhibition in epidermal growth factor receptor–hyperproducing human tumor cells. 107:791.
Hiramoto, Y., Hamaguchi, Y., Shoji, Y., Schroeder, T. E., Shimoda, S., and Nakamura, S. Quantitative studies on the polarization optical properties of living cells. II. The role of microtubules in birefringence of the spindle of the sea urchin egg. 89:121.
—, **Hamaguchi, Y., Shoji, Y., and Shimoda, S.** Quantitative studies on the polarization optical properties of living cells. I. Microphotometric birefringence detection system. 89:115.
— *See* Hamaguchi, Toriyama, Sakai, and Hiramoto.
Hirani, S. *See* Lodish, Kong, Hirani, and Rasmussen.
Hirano, S., Nose, A., Hatta, K., Kawakami, A., and Takeichi, M. Calcium-dependent cell–cell adhesion molecules (cadherins): subclass specificities and possible involvement of actin bundles. 105:2501.
Hirano, T., Hiraoka, Y., and Yanagida, M. A temperature-sensitive mutation of *Schizosaccharomyces pombe* gene *nuc2*$^+$ that encodes a nuclear scaffold-like protein blocks spindle elongation in mitotic anaphase. 106:1171.
—, **Konoha, G., Toda, T., and Yanagida, M.** Essential roles for the RNA polymerase I largest subunit and DNA topoisomerases in the formation of fission yeast nucleolus. 108:243.
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Hiriyanna, K. T., Varkey, J., Beer, M., and Benbow, R. M. Electron microscopic visualization of sites of nascent DNA synthesis by streptavidin–gold binding to biotinylated nucleotides incorporated in vivo. 107:33.
Hirohashi, S. *See* Shimoyama, Yoshida, Terada, Shimosato, Abe, and Hirohashi.
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— Cross-linker system between neurofilaments, microtubules, and membranous organelles in frog axons revealed by the quick-freeze, deep-etching method. 94:129.
—, **Bloom, G. S., and Vallee, R. B.** Cytoskeletal architecture and immunocytochemical localization of microtubule-associated proteins in regions of axons associated with rapid axonal transport: the β,β′-iminodipropionitrile-intoxicated axon as a model system. 101:227.
—, **Glicksman, M. A., and Willard, M. B.** Organization of mammalian neurofilament polypeptides within the neuronal cytoskeleton. 98:1523.
—, **and Heuser, J. E.** Quick-freeze, deep-etch visualization of the cytoskeleton beneath surface differentiations of intestinal epithelial cells. 91:399.
—, **and Heuser, J. E.** Structural evidence that botulinum toxin blocks neuromuscular transmission by impairing the calcium influx that normally accompanies nerve depolarization. 88:160.
—, **and Hisanaga, S.-I.** "Buttonin," a unique button-shaped microtubule-associated protein (75 kD) that decorates spindle microtubule surface hexagonally. 104:1553.
—, **Keller, T. C. S., III, Chasan, R., and Mooseker, M. S.** Mechanism of brush border contactility studied by the quick-freeze, deep-etch method. 96:1325.
—, **Shiomura, Y., and Okabe, S.** Tau proteins: the molecular structure and mode of binding on microtubules. 107:1449.
—, **Sobue, K., Kanda, K., Harada, A., and Yorifuji, H.** The cytoskeletal architecture of the presynaptic terminal and molecular structure of synapsin. 108:1111.
—, **Takemura, R.,and Hisanaga, S.-I.** Cytoskeletal architecture of isolated mitotic spindle with special reference to microtubule-associated proteins and cytoplasmic dynein. 101:1858.
—, **and Tilney, L. G.** Interactions between actin filaments and between actin filaments and membranes in quick-frozen and deeply etched hair cells of the chick ear. 95:249.
—, **Tilney, L. G., Fujiwara, K., and Heuser, J. E.** Organization of actin, myosin, and intermediate filaments in the brush border of intestinal epithelial cells. 94:425.
— *See* Kanni, Takemura, Oshima, Mori, Ihara, Yanagisawa, Masaki, and Hirokawa.
— *See* Murofushi, Kotani, Aizawa, Hisanaga, Hirokawa, and Sakai.
— *See* Nakata and Hirokawa.
— *See* Okabe and Hirokawa.
— *See* Shiomura and Hirokawa.
Hirvonen, H., Sandberg, M., Kalimo, H., Hukkanen, V., Vuorio, E., Salmi, T., and Alitalo, K. The N- *myc* proto-oncogene and IGF-II growth factor mRNAs are expressed by distinct cells in human fetal kidney and brain. 108:1093.
— *See* Sandberg, Tammimen, Hirvonen, Vuorio, and Pihlajaniemi.
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— *See* Hirokawa, Takemura, and Hisanaga.
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Ho, S.-C., Malek-Hedayat, S., Wang, J. L., and Schindler, M. Endogenous lectins from cultured soybean cells: isolation of a protein immunologically cross-reactive with seed soybean agglutinin and analysis of its role in binding of *Rhizobium japonicum*. 103:1043.
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— *See* Penn, Hobson, Rees, and Magee.
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— *See* Stieger, Matter, Baur, Bucher, Höchli, and Hauri.
Hochman, J., Levy, E., Mador, N., Gottesman, M. M., Shearer, G. M., and Okon, E. Cell adhesiveness is related to tumorigenicity in malignant lymphoid cells. 99:1282.
—, **Mador, N., and Panet, A.** Tubular structures in S49 mouse lymphoma are regulated through in vivo host-cell interactions and in vitro interferon treatment. 100:1351.
— *See* Salas, Vega-Salas, Hochman, Rodriguez-Boulan, and Edidin.
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Hochstrasser, J. W., and Sedat, J. W. Three-dimensional organization of *Drosophila melanogaster* interphase nuclei. I. Tissue-specific aspects of polytene nuclear architecture. 104:1455.
Hochstrasser, M., Mathog, D., Gruenbaum, Y., Saumweber, H., and Sedat, J. W. Spatial organization of chromosomes in the salivary gland nuclei of *Drosophila melanogaster*. 102:112.
—, **and Sedat, J. W.** Three-dimensional organization of *Drosophila melanogaster* interphase nuclei. II. Chromosome spatial organization and gene regulation. 104:1471.
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Hoessli, D., Rungger-Brändle, E., Jockusch, B. M., and Gabbiani, G. Lymphoctye α-actinin. Relationship to cell membrane and co-capping with surface receptors. 84:305.
Hoff, M. *See* Dale, Holbrook, Kimball, Hoff, and Sun.
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— *See* Mesland, Hoffman, Caligor, and Goodenough.
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—, **Thompson, G. W., Griffin, J. W., and Price, D. L.** Changes in neurofilament transport coincide temporally with alterations in the caliber of axons in regenerating motor fibers. 101:1332.
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—, **Friedlander, D. R., Chuong, C.-M., Grumet, M., and Edelman, G. M.** Differential contributions of Ng-CAM and N-CAM to cell adhesion in different neural regions. 103:145.
— *See* Crossin, Hoffman, Grumet, Thiery, and Edelman.
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— *See* Salik, Herlands, Hoffmann, and Poccia.
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— *See* Godfrey, Manzi, Clark, and Hoffstein.
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— *See* Holland, Harper, McVey, and Hogan.
— *See* Nomura, Wills, Edwards, Heath, and Hogan.
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— *See* Schindler, Holland, and Hogan.
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—, **McNeil, P. L., and Muscatine, L.** Phagosome-lysosome fusion inhibited by algal symbionts of *Hydra viridis*. 94:56.
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— *See* Dale, Holbrook, Kimball, Hoff, and Sun.
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— *See* Jacobson, O'Dell, Holifield, Murphy, and August.
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Holland, P. W. H., Harper, S. J., McVey, J. H., and Hogan, B. L. M. In vivo expression of mRNA for the Ca^{++}-binding protein SPARC (osteonectin) revealed by in situ hybridization. 105:473.
Hollenbeck, P. J. The distribution, abundance, and subcellular localization of kinesin. 108:2335.
— The transport and assembly of the axonal cytoskeleton. 108:223.
—, **and Bray, D.** Rapidly-transported organelles containing membrane and cytoskeletal components: their relation to axonal growth. 105:2827.
—, **and Chapman, K.** A novel microtubule-associated protein from mammalian nerve shows ATP-sensitive binding to microtubules. 103:1539.
—, **Suprynowicz, F., and Cande, W. Z.** Cytoplasmic dynein-like ATPase

cross-links microtubules in an ATP-sensitive manner. 99:1251.
Hollenberg, P. F. *See* Reddy, Qureshi, Hollenberg, and Reddy.
Holley, K. *See* Salpeter, Spanton, Holley, and Podleski.
Hollingshead, C. J., Caspar, D. L. D., Melchior, V., and Kirschner, D. A. Compaction and particle segregation in myelin membrane arrays. 89:631.
— *See* Baker, Caspar, Hollingshead, and Goodenough.
— *See* Melchior, Hollingshead, and Cahoon.
Hollinshead, M. *See* Griffiths, Fuller, Back, Hollinshead, Pfeiffer, and Simons.
— *See* Tooze, Hollinshead, Frank, and Burke.
Hollyfield, J. G., Varner, H. H., Rayborn, M. E., Liou, G. I., and Bridges, C. D. Endocytosis and degradation of interstitial retinol-binding protein: differential capabilities of cells that border the interphotoreceptor matrix. 100:1676.
— *See* Anderson and Hollyfield.
— *See* Fliesler, Rayborn, and Hollyfield.
Holm, L. *See* Wasenius, Saraste, Salvén, Erämaa, Holm, and Lehto.
Holmdahl, R. *See* Swoboda, Holmdahl, Stöß, and von der Mark.
Holmes, N. J. *See* Brodsky, Holmes, and Parham.
Holmes, S. B. *See* Godfraind, Friedrich, Holmes, and Dubois-Dalcq.
Holmes, W. P. *See* Salzer, Holmes, and Colman.
Holmgren, R. *See* Aamodt, Holmgren, and Culotti.
Holmquist, D. R. G. *See* Githens, Holmquist, Whelan, and Ruby.
Holowka, D. *See* Estes, Monfalcone, Hammes, Holowka, and Baird.
— *See* Kane, Holowka, and Baird.
— *See* Menon, Holowka, and Baird.
— *See* Menon, Holowka, Webb, and Baird.
Holst, M. *See* Egyhazi and Holst.
— *See* Egyházi, Pigon, Ossoinak, Holst, and Tayip.
Holt, G. D., Snow, C. M., Senior, A., Haltiwanger, R. S., Gerace, L., and Hart G. W. Nuclear pore complex glycoproteins contain cytoplasmically disposed O-linked *N*-acetylglucosamine. 104:1157.
Holthuis, J. C. M. *See* Van Hooff, Holthuis, Oestreicher, Boonstra, De Graan, and Gispen.
Hölttä, E. *See* Sistonen, Hölttä, Lehväslaiho, Lehtola, and Alitalo.
Holtzer, H. *See* Antin, Forry-Schaudies, Friedman, Tapscott, and Holtzer.
— *See* Antin, Tokunaka, Nachmias, and Holtzer.
— *See* Dlugosz, Antin, Nachmias, and Holtzer.
— *See* Hill, Duran, Lin, Weber, and Holtzer.
— *See* Lin, Eshelman, Forry-Schaudies, Duran, Lessard, and Holtzer.
— *See* Lin, Eshleman, Grund, Fischman, Masaki, Franke, and Holtzer.
— *See* Lin, Holtzer, Schultheiss, Murray, Masaki, Fischman, and Holtzer.
— *See* Pacifici, Soltesz, Thal, Shanley, Boettiger, and Holtzer.
— *See* Sasse, Horwitz, and Holtzer.
Holtzer, S. *See* Lin, Holtzer, Schultheiss, Murray, Masaki, Fischman, and Holtzer.
Holtzman, E. *See* Liscum, Hauptman, Hood, and Holtzman.
— *See* Ungar, Piscopo, Letizia, and Holtzman.
Holz, R. W. *See* Hampton and Holz.
Hom, B. E. *See* Spiegel, Yamada, Hom, Moss, and Fishman.
Homan, W., Musgrave, A., de Nobel, H., Wagter, R., de Wit, D., Kolk, A., and van den Ende, H. Monoclonal antibodies directed against the sexual binding site of *Chlamydomonas eugametos* gametes. 107:177.
— *See* Kooijman, de Wildt, Beumer, van der Vliet, Homan, Kalshoven, Musgrave, and van den Ende.
Höner, B., Citi, S., Kendrick-Jones, J., and Jockusch, B. M. Modulation of cellular morphology and locomotory activity by antibodies against myosin. 107:2181.
Honig, L. S. *See* Keane, Mehta, Rose, Honig, Loewenstein, and Rutishauser.
Honig, M. G., and Hume, R. I. Fluorescent carbocyanine dyes allow living neurons of identified origin to be studied in long-term cultures. 103:171.
Hoober, J. K., Marks, D. B., Keller, B. J., and Margulies, M. M. Regulation of accumulation of the major thylakoid polypeptides in *Chlamydomonas reinhardtii* y-1 at 25°C and 38°C. 95:552.
Hoock, T. C. *See* DeNofrio, Hoock, and Herman.
Hood, D. C. *See* Liscum, Hauptman, Hood, and Holtzman.
Hood, L. E. *See* Zuniga and Hood.
Höök, M. *See* Couchman, Höök, Rees, and Timpl.
— *See* Johansson and Höök.
— *See* Johansson, Kjellen, Höök, and Timpl.
— *See* LeBaron, Esko, Woods, Johansson, and Höök.
— *See* Murphy-Ullrich and Höök.
— *See* Robinson, Viti, and Höök.
— *See* Stow, Kjéllen, Unger, Höök, and Farquhar.
— *See* Woods, Höök, Kjellén, Smith, and Rees.
Hooper, J. E., Carlson, S. S., and Kelly, R. B. Antibodies to synaptic vesicles purified from *Narcine* electric organ bind a subclass of mammalian nerve terminals. 87:104.
Hoops, H. J., and Witman, G. B. Basal bodies and associated structures are not required for normal flagellar motion or phototaxis in the green alga *Chlorogonium elongatum*. 100:297.
—, **and Witman, G. B.** Outer doublet heterogeneity reveals structural polarity related to beat direction in *Chlamydomonas* flagella. 97:902.
—, **Wright, R. L., Jarvik, J. W., and Witman, G. B.** Flagellar waveform and rotational orientation in a *Chlamydomonas* mutant lacking normal striated fibers. 98:818.
Hootman, S. R., and Ernst, S. A. Characterization of muscarinic acetylcholine receptors in the avian salt gland. 91:781.
Hoover, G. A. *See* Lemmon, Riley, Thomas, Hoover, Maciag, and Bradshaw.
— *See* Maciag, Hoover, Stemerman, and Weinstein.
Hoover, R. L., Dawidowicz, E. A., Robinson, J. M., and Karnovsky, M. J. Role of cholesterol in the capping of surface immunoglobulin receptors on murine lymphocytes. 97:73.
— *See* Karnovsky, Kleinfeld, Hoover, and Klausner.
— *See* Ketis, Lawler, Hoover, and Karnovsky.
Hoover-Litty, H. *See* Hurtley, Bole, Hoover-Litty, Helenius, and Copeland.
Hopcia, K. L. *See* Hartwig, Chambers, Hopcia, and Kwiatkowski.
Hope, J. *See* Zervos, Hope, and Evans.
Hopkins, C. R., and Trowbridge, I. S. Internalization and processing of transferrin and the transferrin receptor in human carcinoma A431 cells. 97:508.
— *See* Miller, Beardmore, Kanety, Schlessinger, and Hopkins.
— *See* Sheterline and Hopkins.
Hoppe, C. A., Connolly, T. P., and Hubbard, A. L. Transcellular transport of polymeric IgA in the rat hepatocyte: biochemical and morphological characterization of the transport pathway. 101:2113.
Hoppeler, H. *See* Griffiths, Warren, Quinn, Mathieu-Costello, and Hoppeler.
Hopper, A. K. *See* Li, Hopper, and Martin.
Horigan, E. A. *See* Klein, Brown, Oegema, Brenchley, Anderson, Dickinson, Horigan, and Hassell.
Horikoshi, S. *See* Laurie, Horikoshi, Killen, Segui-Real, and Yamada.
Horisberger, U. *See* Gennaro, Dewald, Horisberger, Gubler, and Baggiolini.
Hörler, I. *See* Bruckner, Hörler, Mendler, Houze, Winterhalter, Eich-Bender, and Spycher.
Hörmann, H. *See* Schmidt, Robenek, Harrach, Glössl, Nolte, Hörmann, Richter, and Kresse.
Horn, V. J. *See* Jerdan, Varner, Greenberg, Horn, and Martin.
Hornick, C. A., Hamilton, R. L., Spaziani, E., Enders, G. H., and Havel, R. J. Isolation and characterization of multivesicular bodies from rat hepatocytes: an organelle distinct from secretory vesicles of the Golgi apparatus. 100:1558.
Hornung, J. *See* Boukamp, Petrussevska, Breitkreutz, Hornung, Markham, and Fusenig.
Horovitz, O., Knaack, D., Podleski, T. R., and Salpeter, M. M. Acetylcholine receptor α-subunit mRNA is increased by ascorbic acid in cloned L_5 muscle cells: Northern blot analysis and in situ hybridization. 108:1823.
—, **Spitsberg, V., and Salpeter, M. M.** Regulation of acetylcholine receptor synthesis at the level of translation in rat primary muscle cells. 108:1817.
Horowits, R., Maruyama, K., and Podolsky, R. J. Elastic behavior of connectin filaments during thick filament movement in activated skeletal muscle. 109:2169.
—, **and Podolsky, R. J.** The positional stability of thick filaments in activated skeletal muscle depends on sarcomere length: evidence for the role of titin filaments. 105:2217.
Horowitz, S. B. *See* Paine, Austerberry, Desjarlais, and Horowitz.
Horst, C. J., Forestner, D. M., and Besharse, J. C. Cytoskeletal–membrane interactions: a stable interaction between cell surface glycoconjugates and doublet microtubules of the photoreceptor connecting cilium. 105:2973.
Hortsch, M., Avossa, D., and Meyer, D. I. Characterization of secretory protein translocation: ribosome–membrane interaction in endoplasmic reticulum. 103:241.
Horton, M. *See* Davies, Warwick, Totty, Philp, Helfrich, and Horton.
Horvat, R., Hovorka, A., Dekan, G., and Kerjaschki, D. Endothelial cell membranes contain podocalyxin—the major sialoprotein of visceral glomerular epithelial cells. 102:484.
Horwich, A. L., Fenton, W. A., Firgaira, F. A., Fox, J. E., Kolansky, D., Mellman, I. S., and Rosenberg, L. E. Expression of amplified DNA sequences for ornithine transcarbamylase in HeLa cells: arginine residues may be required for mitochondrial import of enzyme precursor. 100:1515.
—, **Kalousek, F., Fenton, W. A. Furtak, K., Pollock, R. A., and Rosenberg, L. E.** The ornithine transcarbamylase leader peptide directs mito-

chondrial import through both its midportion structure and net positive charge. 105:669.
Horwitz, A., Duggan, K., Greggs, R., Decker, C., and Buck, C. The CSAT antigen has properties of a receptor for laminin and fibronectin. 101:2134.
— *See* Decker, Greggs, Duggan, Stubbs, and Horwitz.
— *See* Sasse, Horwitz, and Holtzer.
Horwitz, A. F. *See* Buck, Shea, Duggan, and Horwitz.
— *See* Cornell and Horwitz.
— *See* Cornell, Nissley, and Horwitz.
— *See* Damsky, Knudsen, Bradley, Buck, and Horwitz.
— *See* Neff, Lowrey, Decker, Tovar, Damsky, Buck, and Horwitz.
Horwitz, J. *See* Bok, Dockstader, and Horwitz.
— *See* FitzGerald, Bok, and Horwitz.
— *See* Wistow, Lietman, Williams, Stapel, de Jong, Horwitz, and Piatigorsky.
Horwitz, M. A., and Maxfield, F. R. *Legionella pneumophila* inhibits acidification of its phagosome in human monocytes. 99:1936.
Horwitz, S. B., Chia, G. H., Harracksingh, C., Orlow, S., Pifko-Hirst, S., Schneck, J., Sorbara, L., Speaker, M., Wilk, E. W., and Rosen, O. M. Trifluoperazine inhibits phagocytosis in a macrophagelike cultured cell line. 91:798.
— *See* Manfredi, Parness, and Horwitz.
— *See* Parness and Horwitz.
Hoshina, M., Boothby, M., and Boime, I. Cytological localization of chorionic gonadotropin α and placental lactogen mRNAs during development of the human placenta. 93:190.
—, Hussa, R., Pattillo, R., and Boime, I. Cytological distribution of chorionic gonadotropin subunit and placental lactogen messenger RNA in neoplasms derived from human placenta. 97:1200.
Hosick, H. L. *See* Kusakabe, Yokoyama, Sakakura, Nomura, Hosick, and Nishizuka.
Hosick, T. J. *See* Beck, Hosick, and Sinensky.
Hosken, N. *See* Gould, Keller, Hosken, Wilkinson, and Subramani.
Hosokawa, Y., and Miki-Noumura, T. Bending motion of *Chlamydomonas* axonemes after extrusion of central-pair microtubules. 105:1297.
Hosoya, H., and Mabuchi, I. A 45,000-mol-wt protein-actin complex from unfertilized sea urchin egg affects assembly properties of actin. 99:994.
— *See* Mabuchi, Hamaguchi, Kobayashi, Hosoya, Tsukita, and Tsukita.
Hotani, H. *See* Vale and Hotani.
Hou, D. C. *See* Rosenfeld, Hou, Dingus, Meza, and Bryan.
Hou, E. *See* Baumann, Hou, and Jahreis.
— *See* Cook, Hou, Hou, Cairo, and Doyle.
Hou, Y. *See* Cook, Hou, Hou, Cairo, and Doyle.
— *See* Scullion, Hou, Puddington, Rose, and Jacobson.
Hough, R. *See* McGarry, Hough, Rogers, and Rechsteiner.
Houliston, E., and Maro, B. Posttranslational modification of distinct microtubule subpopulations during cell polarization and differentiation in the mouse preimplantation embryo. 108:543.
—, Pickering, S. J., and Maro, B. Redistribution of microtubules and pericentriolar material during the development of polarity in mouse blastomeres. 104:1299.
Housman, D. *See* Bridges, Levenson, Housman, and Cantley.
— *See* Volloch and Housman.
Houze, Y. *See* Bruckner, Hörler, Mendler, Houze, Winterhalter, Eich-Bender, and Spycher.
Hovorka, A. *See* Horvat, Hovorka, Dekan, and Kerjaschki.
Hovsépian, S. *See* Fayet, Hovsépian, Dickson, and Lissitzky.
Howard, F. D., Petty, H. R., and McConnell, H. M. Identification of phagocytosis-associated surface proteins of macrophages by two-dimensional gel electrophoresis. 92:283.
Howard, G. C., Abmayr, S. M., Shinefeld, L. A, Sato, V. L., and Elgin, S. C. R. Monoclonal antibodies against a specific nonhistone chromosomal protein of *Drosophila* associated with active genes. 88:219.
— *See* Christensen, LeStourgeon, Jamrich, Howard, Serunian, Silver, and Elgin.
Howard, R. F., and Sheppard, J. R. Cell cycle changes in the adenylate cyclase of C_6 glioma cells. 90:169.
Howard, R. J., and Aist, J. R. Cytoplasmic microtubules and fungal morphogenesis: Ultrastructural effects of methyl benzimidazole-2-carbylamate determined by freeze-substitution of hyphal tip cells. 87:55.
—, Lyon, J. A., Uni, S., Saul, A. J., Aley, S. B., Klotz, F., Panton, L. J., Sherwood, J. A., Marsh, K., Aikawa, M., and Rock, E. P. Transport of an M_r ~300,000 *Plasmodium falciparum* protein (Pf EMP 2) from the intraerythrocytic asexual parasite to the cytoplasmic face of the host cell membrane. 104:1269.
—, Uni, S., Aikawa, M., Aley, S. B., Leech, J. H., Lew, A. M., Wellems, T. E., Rener, J., and Taylor, D. W. Secretion of a malarial histidine-rich protein (Pf HRP II) from *Plasmodium falciparum*-infected erythrocytes. 103:1269.
— *See* Leech, Barnwell, Aikawa, Miller, and Howard.
Howard, T. H., and Meyer, W. H. Chemotactic peptide modulation of actin assembly and locomotion in neutrophils. 98:1265.
—, and Oresajo, C. O. The kinetics of chemotactic peptide-induced change in F-actin content, F-actin distribution, and the shape of neutrophils. 101:1078.
Howe, C. L., and Mooseker, M. S. Characterization of the 110-kdalton actin-, calmodulin-, and membrane-binding protein from microvilli of intestinal epithelial cells. 97:4.
—, Mooseker, M. S., and Graves, T. A. Brush-border calmodulin: A major component of the isolated microvillus core. 85:916.
—, Sacramone, L. M., Mooseker, M. S., and Morrow, J. S. Mechanisms of cytoskeletal regulation: modulation of membrane affinity in avian brush border and erythrocyte spectrins. 101:1379.
— *See* Mooseker, Graves, Wharton, Falco, and Howe.
Howell, K. E., and Palade, G. E. Hepatic Golgi fractions resolved into membrane and content subfractions. 92:822.
—, and Palade, G. E. Heterogeneity of lipoprotein particles in hepatic Golgi fractions. 92:833.
— *See* Gruenberg, Griffiths, and Howell.
— *See* Sztul, Howell, and Palade.
— *See* Tooze, Kern, Fuller, and Howell.
Howell, T. W., Cockcroft, S., and Gomperts, B. D. Essential synergy between Ca^{2+} and guanine nucleotides in exocytotoic secretion from permeabilized rat mast cells. 105:191.
— *See* Cockcroft, Howell, and Gomperts.
Howlett, A. R. *See* Carter, Howlett, Martin, and Bissell.
Howlett, S. K. *See* Maro, Howlett, and Webb.
Howley, P. M. *See* Banks-Schlegel and Howley.
Hradek, G. T. *See* Burwen, Barker, Goldman, Hradek, Raper, and Jones.
— *See* Silve, Hradek, Jones, and Arnaud.
Hsieh, P., and Chen, L. B. Behavior of cells seeded in isolated fibronectin matrices. 96:1208.
—, Segal, R., and Chen, L. B. Studies of fibronectin matrices in living cells with fluoresceinated gelatin. 87:14.
—, and Sueoka, N. Antisera inhibiting mammalian cell spreading and possible cell surface antigens involved. 86:866.
Hsing, Y. C. *See* Bourguignon, Nagpal, and Hsing.
Hsiung, N., and Kucherlapati, R. Histone gene expression and chromatin structure in mammalian cell hybrids. 87:227.
— *See* Warrick, Hsiung, Shows, and Kucherlapati.
Hsu, Y.-M., and Wang, J. L. Growth control in cultured 3T3 fibroblasts. V. Purification of an M_r 13,000 polypeptide responsible for growth inhibitory activity. 102:362.
Hu, J. S. *See* Olson, Sternberg, Hu, Spizz, and Wilcox.
Huang, A. J.-W. *See* Tseng, Hatchell, Tierney, Huang, and Sun.
Huang, B., Mengersen, A., and Lee, V. D. Molecular cloning of cDNA for caltractrin, a basal body-associated Ca^{2+}-binding protein: homology in its protein sequence with calmodulin and the yeast *CDC31* gene product. 107:133.
—, Piperno, G., Ramanis, Z., and Luck, D. J. L. Radial spokes of *Chlamydomonas* flagella: Genetic analysis of assembly and function. 88:80.
—, Watterson, D. M., Lee, V. D. and Schibler, M. J. Purification and characterization of a basal body-associated Ca^{2+}-binding protein. 107:121.
— *See* Adams, Huang, Piperno, and Luck.
— *See* Brokaw, Luck, and Huang.
— *See* Dutcher, Huang, and Luck.
— *See* Piperno, Huang, Ramanis, and Luck.
— *See* Segal, Huang, Ramanis, and Luck.
Huang, J. S., Huang, S. S., and Deuel, T. F. Human platelet-derived growth factor: radioimmunoassay and discovery of a specific plasma-binding protein. 97:383.
— *See* Senior, Huang, Griffin, and Deuel.
Huang, L. *See* Connor and Huang.
Huang, S. S. *See* Huang, Huang, and Deuel.
— *See* Ryo, Nakeff, Huang, Ginsberg, and Deuel.
Huarte, J., Belin, D., Bosco, D., Sappino, A.-P., and Vassalli, J.-D. Plasminogen activator and mouse spermatozoa: urokinase synthesis in the male genital tract and binding of the enzyme to the sperm cell surface. 104:1281.
— *See* Sappino, Huarte, Belin, and Vassalli.
Hubbard, A. L., Bartles, J. R., and Braiterman, L. T. Identification of rat hepatocyte plasma membrane proteins using monoclonal antibodies. 100:1115.
—, and Ma, A. Isolation of rat hepatocyte plasma membranes. II. Identification of membrane-associated cytoskeletal proteins. 96:230.

—, **Wall, D. A., and Ma, A.** Isolation of rat hepatocyte plasma membranes. I. Presence of the three major domains. 96:217.
— *See* Bartles, Braiterman, and Hubbard.
— *See* Bartles, Feracci, Stieger, and Hubbard.
— *See* Dunn, Connolly, and Hubbard.
— *See* Dunn and Hubbard.
— *See* Fujiki, Fowler, Shio, Hubbard, and Lazarow.
— *See* Fujiki, Hubbard, Fowler, and Lazarow.
— *See* Hoppe, Connolly, and Hubbard.
— *See* Mueller and Hubbard.
— *See* Roman and Hubbard.
— *See* Wall and Hubbard.
— *See* Zeitlin and Hubbard.
Hubble, R. *See* Karsenti, Newport, Hubble, and Kirschner.
— *See* Ring, Hubble, and Kirschner.
Huber, G., Alaimo-Beuret, D., and Matus, A. MAP3: characterization of a novel microtubule-associated protein. 100:496.
—, **and Matus, A.** Immunocytochemical localization of microtubule-associated protein 1 in rat cerebellum using monoclonal antibodies. 98:777.
Huber, S. *See* Vaughan, Mendler, Huber, Bruckner, Winterhalter, Irwin, and Mayne.
Hudry-Clergeon, G. *See* Tranqui, Andrieux, Hudry-Clergeon, Ryckewaert, Soyez, Chapel, Ginsberg, Plow, and Marguerie.
Hudson, L. *See* Dubois-Dalcq, Behar, Hudson, and Lazzarini.
Hudson, L. D., Friedrich, V. L., Jr., Behar, T., Dubois-Dalcq, M., and Lazzarini, R. A. The initial events in myelin synthesis: orientation of proteolipid protein in the plasma membrane of cultured oligodendrocytes. 109:717.
Huesca, M. *See* Grossi de Sa, Martins de Sa, Harper, Olink-Coux, Huesca, and Scherrer.
Huestis, W. H. *See* Daleke and Huestis.
— *See* Ferrell and Huestis.
Huet, C., Sahuquillo-Merino, C., Coudrier, E., and Louvard, D. Absorptive and mucus-secreting subclones isolated from a multipotent intestinal cell line (HT-29) provide new models for cell polarity and terminal differentiation. 105:345.
— *See* Dudouet, Robine, Huet, Sahuquillo-Merino, Blair, Coudrier, and Louvard.
— *See* Goud, Huet, and Louvard.
Huff, K., End, D., and Guroff, G. Nerve growth factor-induced alteration in the response of PC12 pheochromocytoma cells to epidermal growth factor. 88:189.
Huffaker, T. C., Thomas, J. H., and Botstein, D. Diverse effects of β-tubulin mutations on microtubule formation and function. 106:1997.
Hughes, R. C. *See* Stamatoglou, Hughes, and Lindahl.
Hughes, S. H. *See* Lin, Helfman, Hughes, and Chou.
Hügle, B., Hazan, R., Scheer, U., and Franke, W. W. Localization of ribosomal protein S1 in the granular component of the interphase nucleolus and its distribution during mitosis. 100:873.
— *See* Scheer, Hügle, Hazan, and Rose.
Hügle-Dörr, B. *See* Benavente, Rose, Reimer, Hügle-Dörr, and Scheer.
Huhtala, M.-L. *See* Rauvala, Merenmies, Pihlaskari, Korkolainen, Huhtala, and Panula.
Hui, S. W., Stewart, C. M., Carpenter, M. P., and Stewart, T. P. Effects of cholesterol on lipid organization in human erythrocyte membrane. 85:283.
Hui, S.-W. *See* Onuma and Hui.
Huima, T. *See* Pfeffer, Huima, and Redman.
Huisman, H. *See* Roos, Spiele, Feltkamp, Huisman, Wiegant, Traas, and Mesland.
Huitorel, P., and Kirschner, M. W. The polarity and stability of microtubule capture by the kinetochore. 106:151.
Hukkanen, V. *See* Hirvonen, Sandberg, Kalimo, Hukkanen, Vuorio, Salmi, and Alitalo.
Hull, B. E. *See* Iwanij, Hull, and Jamieson.
Hull, J. D., Gilmore, R., and Lamb, R. A. Integration of a small integral membrane protein, M_2, of influenza virus into the endoplasmic reticulum: analysis of the internal signal-anchor domain of a protein with an ectoplasmic NH_2 terminus. 106:1489.
— *See* Parks, Hull, and Lamb.
Hull, R. N. *See* Dayer, Vassalli, Bobbitt, Hull, Reich, and Krane.
Hulme, J. S. *See* Dawson, Hulme, and Lloyd.
Hülser, D. *See* Traub, Look, Dermietzel, Brümmer, Hülser, and Willecke.
Humbel, B. *See* Müller-Glauser, Humbel, Glatt, Sträuli, Winterhalter, and Bruckner.
Hume, D. A., Perry, V. H., and Gordon, S. Immunohistochemical localization of a macrophage-specific antigen in developing mouse retina: phagocytosis of dying neurons and differentiation of microglial cells to form a regular array in the plexiform layers. 97:253.
Hume, R. I. *See* Honig and Hume.
Humphries, M. J., Akiyama, S. K., Komoriya, A., Olden, K., and Yamada, K. M. Identification of an alternatively spliced site in human plasma fibronectin that mediates cell type–specific adhesion. 103:2637.
—, **Akiyama, S. K., Komoriya, A., Olden, K., and Yamada, K. M.** Neurite extension of chicken peripheral nervous system neurons on fibronectin: relative importance of specific adhesion sites in the central cell-binding domain and the alternatively spliced type III connecting segment. 106:1289.
— *See* Nagata, Humphries, Olden, and Yamada.
— *See* Wayner, Garcia-Pardo, Humphries, McDonald, and Carter.
Hung, J. T. *See* Cardell, Michaels, Hung, and Cardell.
Hunnicutt, G. *See* Snell, Kosfiszer, Clausell, Perillo, Imam, and Hunnicutt.
Hunt, C. R. *See* Cook, Hunt, and Spiegelman.
Hunt, R. C. *See* Marshall, Thureson-Klein, and Hunt.
Hunt, T. *See* Standart, Bray, George, Hunt, and Ruderman.
— *See* Standart, Hunt, and Ruderman.
Hunter, E. *See* Davis and Hunter.
— *See* Hardwick, Shaw, Wills, and Hunter.
— *See* Hearing, Hunter, Rodgers, Gething, and Sambrook.
— *See* Wills, Srinivas, and Hunter.
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— *See* Defize, Arndt-Jovin, Jovin, Boonstra, Meisenhelder, Hunter, de Hey, and de Laat.
— *See* Defize, Boonstra, Meisenhelder, Kruijer, Tertoolen, Tilly, Hunter, van Bergen en Henegouwen, Moolenaar, and de Laat.
— *See* Gould, Cooper, Bretscher, and Hunter.
— *See* Gould, Cooper, and Hunter.
— *See* Nigg, Cooper, and Hunter.
Hunter, V. A. *See* Olden, Law, Hunter, Romain, and Parent.
Hunziker, E. B., Herrmann, W., Schenk, R. K., Mueller, M., and Moor, H. Cartilage ultrastructure after high pressure freezing, freeze substitution, and low temperature embedding. I. Chondrocyte ultrastructure—implications for the theories of mineralization and vascular invasion. 98:267.
—, **and Schenk, R. K.** Cartilage ultrastructure after high pressure freezing, freeze substitution, and low temperature embedding. II. Intercellular matrix ultrastructure—preservation of proteoglycans in their native state. 98:277.
Hunziker, W., and Mellman, I. Expression of macrophage–lymphocyte fibronectin receptors in Madin–Darby canine kidney cells: polarity and transcytosis differ for isoforms with or without coated pit localization domains. 109:3291.
Hur, K. C. *See* Johnson, Lampe, Hur, Louis, and Johnson.
Hurkman, W. J., Smith, L. D., Richter, J., and Larkins, B. A. Subcellular compartmentalization of maize storage proteins in *Xenopus* oocytes injected with zein messenger RNAs. 89:292.
Hurlbut, W. P. *See* Ceccarelli and Hurlbut.
Hurley, K. P. *See* Spearman, Hurley, Olivas, Ulrich, and Butcher.
Hurtley, S. M., Bole, D. G., Hoover-Litty, H., Helenius, A., and Copeland, C. S. Interactions of misfolded influenza virus hemagglutinin with binding protein (BiP). 108:2117.
Hurwitz, L. *See* McGuffee, Hurwitz, Little, and Skipper.
Husain-Chishti, A. *See* Byers, Husain-Chishti, Dubreuil, Branton, and Goldstein.
Hussa, R. *See* Hoshina, Hussa, Pattillo, and Boime.
Hussein, S. *See* Schreiner, Bauer, Danilov, Hussein, Sczekan, and Juliano.
Hutchens, J. A. *See* Fuller, Caulton, Hutchens, Kaufman, and Raff.
Hutchison, N. Lampbrush chromosomes of the chicken, *Gallus domesticus*. 105:1493.
Hutchison, N. J., Langer-Safer, P. R., Ward, D. C., and Hamkalo, B. A. *In situ* hybridization at the electron microscope level: hybrid detection by autoradiography and colloidal gold. 95:609.
Huttner, K. M., Barbosa, J. A., Scangos, G. A., Pratcheva, D. D., and Ruddle, F. H. DNA-mediated gene transfer without carrier DNA. 91:153.
Huttner, S. *See* Rosa, Weiss, Pepperkok, Ansorge, Niehrs, Stelzer, and Huttner.
Huttner, W. B., Schiebler, W., Greengard, P., and De Camilli, P. Synapsin I (Protein I), a nerve terminal-specific phosphoprotein. III. Its association with synaptic vesicles studied in a highly purified synaptic vesicle preparation. 96:1374.
— *See* Baeuerle and Huttner.
— *See* De Camilli, Harris, Huttner, and Greengard.
— *See* Friederich, Fritz, and Huttner.
— *See* Rosa, Fumagalli, Zanini, and Huttner.
— *See* Rosa, Hille, Lee, Zanini, De Camilli, and Huttner.

Hwang, C. *See* Goodenough, Detmers, and Hwang.
Hwang, S., Jascur, T., Vestweber, D., Pon, L., and Schatz, G. Disrupted yeast mitochondria can import precursor proteins directly through their inner membrane. 109:487.
Hwo, S., and Bryan, J. Immuno-identification of a Ca^{2+}-induced conformational changes in human gelsolin and brevin. 102:227.
— *See* Bryan and Hwo.
— *See* Carron, Hwo, Dingus, Benson, Meza, and Bryan.
— *See* Dingus, Hwo, and Bryan.
Hyams, J. S. *See* King, Hyams, and Luba.
Hyatt, H. *See* Begg, Rebhun, and Hyatt.
— *See* Primakoff, Hyatt, and Myles.
— *See* Primakoff, Hyatt, and Tredick-Kline.
Hyatt, H. A. *See* Begg, Salmon, and Hyatt.
Hyde, J. *See* Bowers, Olszewski, and Hyde.
Hyman, A. A. Centrosome movement in the early divisions of *Caenorhabditis elegans*: a cortical site determining centrosome position. 109:1185.
Hyman, C., and Froehner, S. C. Degradation of acetylcholine receptors in muscle cells: effect of leupeptin on turnover rate, intracellular pool sizes, and receptor properties. 96:1316.
—, **and Pfenninger, K. H.** Intracellular regulators of neuronal sprouting: calmodulin-binding proteins of nerve growth cones. 101:1153.
Hymann, A. A., and White, J. G. Determination of cell division axes in the early embryogenesis of *Caenorhabditis elegans*. 105:2123.
Hynes, R. O., Marcantonio, E. E., Stepp, M. A., Urry, L. A., and Yee, G. H. Integrin heterodimer and receptor complexity in avian and mammalian cells. 109:409.
—, **and Yamada, K. M.** Fibronectins: multifunctional modular glycoproteins. 95:369.
— *See* Courtoy, Kanwar, Hynes, and Farquhar.
— *See* ffrench-Constant, Van De Water, Dvorak, and Hynes.
— *See* Lawler and Hynes.
— *See* Lawler, Weinstein, and Hynes.
— *See* Marcantonio and Hynes.
— *See* Solowska, Guan, Marcantonio, Trevithick, Buck, and Hynes.
— *See* Van De Water, Schroeder, Crenshaw, and Hynes.
Hyodo, A. *See* Takei, Oyama, Kimura, Hyodo, Mizuno, and Shimura.

I

Iacopetta, B., Carpentier, J.-L., Pozzan, T., Lew, D. P., Gorden, P., and Orci, L. Role of intracellular calcium and protein kinase C in the endocytosis of transferrin and insulin by HL60 cells. 103:851.
— *See* Carpentier, Brown, Iacopetta, and Orci.
Ibarra, G. *See* Meza, Ibarra, Sabanero, Martinez-Palomo, and Cereijido.
Ibbotson, K. J., Roodman, G. D., McManus, L. M., and Mundy, G. R. Identification and characterization of osteoclast-like cells and their progenitors in cultures of feline marrow mononuclear cells. 99:471.
Ibrahimi, I. Dithiothreitol and the translocation of preprolactin across mammalian endoplasmic reticulum. 105:1555.
— Signal recognition particle causes a transient arrest in the biosynthesis of prepromelittin and mediates its translocation across mammalian endoplasmic reticulum. 104:61.
— *See* Walter, Ibrahimi, and Blobel.
Ichikawa, Y. *See* Nagata, Sagara, and Ichikawa.
Ierardi, L. A., Moss, S. B., and Bellvé, A. R. Synaptonemal complexes are integral components of the isolated mouse spermatocyte nuclear matrix. 96:1717.
Ignatius, M. J. *See* Müller, Ignatius, Hangen, and Shooter.
Ihara, Y. *See* Kanai, Takemura, Oshima, Mori, Ihara, Yanagisawa, Masaki, and Hirokawa.
Iida, H., and Yahara, I. A heat shock-resistant mutant of *Saccharomyces cerevisae* shows constitutive synthesis of two heat shock proteins and altered growth. 99:1441.
—, **and Yahara, I.** Durable synthesis of high molecular weight heat shock proteins in G_0 cells of the yeast and other eucaryotes. 99:199.
—, **and Yahara, I.** Specific early-G_1 blocks accompanied with stringent response in *Saccharomyces cerevisiae* lead to growth arrest in resting state similar to the G_0 of higher eucaryotes. 98:1185.
Iida, K. *See* Yin, Iida, and Janmey.
Ikai, A. *See* Sotoh, Iwane, Matsuzaki, Kikuchi, and Ikai.
Ikeda, K. *See* Koenig, Saito, and Ikeda.
— *See* Kosaka and Ikeda.
Ill, C. R., Engvall, E., and Ruoslahti, E. Adhesion of platelets to laminin in the absence of activation. 99:2140.
Imagawa, T. *See* Block, Imagawa, Campbell, and Franzini-Armstrong.
Imaizumi, M. *See* Notario, Gutkind, Imaizumi, Katamine, and Robbins.
Imam, S. *See* Snell, Kosfiszer, Clausell, Perillo, Imam, and Hunnicutt.
Imam, S. H., Buchanan, M. J., Shin, H.-C., and Snell, W. J. The *Chlamydomonas* cell wall: characterization of the wall framework. 101:1599.
—, **and Snell, W. J.** The *Chlamydomonas* cell wall-degrading enzyme, lysin, acts on two substrates within the framework of the wall. 106:2211.
— *See* Buchanan, Imam, Eskue, and Snell.
Imanaka, T., Small, G. M., and Lazarow, P. B. Translocation of acyl-CoA oxidase into peroxisomes requires ATP hydrolysis but not a membrane potential. 105:2915.
Imhof, B. A. *See* Behrens, Birchmeier, Goodman, and Imhof.
— *See* Savagner, Imhof, Yamada, and Thiery.
Inagami, T. *See* Kohtz, Discher, Inagami, and Goldman.
Ince, C., Coremans, J. M. C. C., Ypey, D. L., Leijh, P. C. J., Verveen, A. A., and van Furth, R. Phagocytosis by human macrophages is accompanied by changes in ionic channel currents. 106:1873.
—, **Ypey, D. L., van Furth, R., and Verveen, A. A.** Estimation of the membrane potential of cultured macrophages from the fast potential transient upon microelectrode entry. 95:796.
Inesi, G. *See* Chiesi, Ho, Inesi, Somlyo, and Somlyo.
Inestrosa, N. C. *See* Brandan, Maldonado, Garrido, and Inestrosa.
Infusini, E. *See* Castellani, Siri, Rosellini, Infusini, Borsi, and Zardi.
Ingalls, H. M. *See* Luna, Goodloe-Holland, and Ingalls.
Ingber, D. E., and Folkman, J. Mechanochemical switching between growth and differentiation during fibroblast growth factor-stimulated angiogenesis in vitro: role of extracellular matrix. 109:317.
Ingold, A. L., Cohn, S. A., and Scholey, J. M. Inhibition of kinesin-driven microtubule motility by monoclonal antibodies to kinesin heavy chains. 107:2659.
Ingraham, L. M., Burns, C. P., Boxer, L. A., Baehner, R. L., and Haak, R. A. Fluidity properties and lipid composition of erythrocyte membranes in Chediak-Higashi syndrome. 89:510.
Inoue, S. Video image processing greatly enhances contrast, quality, and speed in polarization-based microscopy. 89:346.
Inoué, S., Leblond, C. P., and Laurie, G. W. Ultrastructure of Reichert's membrane, a multilayered basement membrane in the parietal wall of the rat yolk sac. 97:1524.
—, **and Tilney, L. G.** Acrosomal reaction of *Thyone* sperm. I. Changes in the sperm head visualized by high-resolution video microscopy. 93:812.
— *See* Grant, LeBlond, Kleinman, Inoué, and Hassell.
— *See* Johnson, Inoué, Flint, and Hastings.
— *See* Kiehart, Mabuchi, and Inoué.
— *See* Tilney and Inoué.
— *See* Walker, Inoué, and Salmon.
Insel, P. A. *See* Meier, Snavely, Brown, Brown, and Insel.
Inui, M. *See* Saito, Inui, Radermacher, Frank, and Fleischer.
Iozzo, R. V. Biosynthesis of heperan sulfate proteoglycan by human colon carcinoma cells and its localization at the cell surface. 99:403.
Ip, W. Modulation of desmin intermediate filament assembly by a monoclonal antibody. 106:735.
—, **Danto, S. I., and Fischman, D. A.** Detection of desmin-containing intermediate filaments in cultured muscle and nonmuscle cells by immunoelectron microscopy. 96:401.
— *See* Bard, Franzini-Armstrong, and Ip.
Irwin, M. H., Silvers, S. H., and Mayne, R. Monoclonal antibody against chicken type IX collagen: preparation, characterization, and recognition of the intact form of type IX collagen secreted by chondrocytes. 101:814.
— *See* Abrahamson, Irwin, St. John, Perry, Accavitti, Heck, and Couchman.
— *See* Mayne, Wiedemann, Irwin, Sanderson, Fitch, Linsenmayer, and Kühn.
Irwin, M. I. *See* Vaughan, Mendler, Huber, Bruckner, Winterhalter, Irwin, and Mayne.
Isaacs, J., Savion, N., Gospodarowicz, D., and Shuman, M. A. Effect of cell density on thrombin binding to a specific site on bovine vascular endothelial cells. 90:670.
Isaacs, W. B., Kim, I. S., Struve, A., and Fulton, A. B. Biosynthesis of titin in cultured skeletal muscle cells. 109:2189.
Isenberg, G. *See* Aebi, Fowler, Isenberg, Pollard, and Smith.
— *See* André, Brink, Gerisch, Isenberg, Noegel, Schleicher, Segall, and Wallraff.
Isenberg, K. E. *See* Merlie, Isenberg, Russell, and Sanes.
Isenberg, W. M., McEver, R. P., Phillips, D. R., Shuman, M. A., and Bainton, D. F. The platelet fibrinogen receptor: an immunogold-surface replica study of agonist-induced ligand binding and receptor clustering. 104:1655.
Ishigami, M., Kuroda, K., and Hatano, S. Dynamic aspects of the contractile system in *Physarum* plasmodium. III. Cyclic contraction-relaxation of the plasmodial fragment in accordance with the generation-

degeneration of cytoplasmic actomyosin fibrils. 105:381.
Ishiguro, K., Murofushi, H., and Sakai, H. Evidence that cAMP-dependent protein kinase and a protein factor are involved in reactivation of Triton X-100 models of sea urchin and starfish spermatozoa. 92:777.
Ishihara, A., Holifield, B., and Jacobson, K. Analysis of lateral redistribution of a monoclonal antibody complex plasma membrane glycoprotein which occurs during cell locomotion. 106:329.
— *See* Duband, Nuckolls, Ishihara, Hasegawa, Yamada, Thiery, and Jacobson.
Ishijima, S. *See* Wolf, Hagopian, and Ishijima.
Ishikawa, H. *See* Taniguchi and Ishikawa.
— *See* Tsukita and Ishikawa.
— *See* Tsukita, Ishikawa, and Kurokawa.
— *See* Tsukita, Tsukita, and Ishikawa.
— *See* Tsukita, Tsukita, Ishikawa, Kurokawa, Morimoto, Sobue, and Kakiuchi.
— *See* Tsukita, Tsukita, Ishikawa, Sato, and Nakao.
— *See* Tsukita, Tsukita, Usukura, and Ishikawa.
Ishikawa, T. *See* Uno, Matsumoto, Hirata, and Ishikawa.
Ishiwata, S., and Funatsu, T. Does actin bind to the ends of thin filaments in skeletal muscle? 100:282.
Ishizaka, T. *See* Galli, Dvorak, Marcum, Ishizaka, Nabel, Der Simonian, Pyne, Goldin, Rosenberg, Cantor, and Dvorak.
Isom, H., Georgoff, I., Salditt-Georgieff, M., and Darnell, J. E., Jr. Persistence of liver-specific mRNA in cultured hepatocytes: different regulatory events for different genes. 105:2877.
Isom, H. C., Tevethia, M. J., and Taylor, J. M. Transformation of isolated rat hepatocytes with simian virus 40. 85:651.
Israel, M. *See* Manaranche, Thieffry, and Israel.
— *See* Morel, Marsal, Manaranche, Lazereg, Mazie, and Israel.
Israël, M. *See* Morel, Manaranche, Israël, and Gulik-Krzywicki.
Ito, S. *See* Grab, Ito, Kara, and Rovis.
— *See* Grab, Webster, Ito, Fish, Verjee, and Lonsdale-Eccles.
— *See* Swan, Linck, Ito, and Fawcett.
Ito, T., Tanaka, T., Yoshida, T., Onoda, K., Ohta, H., Hagiwara, M., Itoh, Y., Ogura, M., Saito, H., and Hidaka, H. Immunocytochemical evidence for translocation of protein kinase C in human megakaryoblastic leukemic cells: synergistic effects of Ca^{2+} and activators of protein kinase C on the plasma membrane association. 107:929.
Itoh, M. *See* Tsukita, Itoh, and Tsukita.
Itoh, Y. *See* Ito, Tanaka, Yoshida, Onoda, Ohta, Hagiwara, Itoh, Ogura, Saito, and Hidaka.
Itoyama, Y. *See* Trapp, Itoyama, Sternberger, Quarles, and Webster.
Ivanov, I. E. *See* Croze, Ivanov, Kreibich, Adesnik, Sabatini, and Rosenfeld.
— *See* Duszenko, Ivanov, Ferguson, Plesken, and Cross.
— *See* Rindler, Ivanov, Plesken, Rodriguez-Boulan, and Sabatini.
— *See* Rindler, Ivanov, Plesken, and Sabatini.
— *See* Rindler, Ivanov, and Sabatini.
— *See* Rizzolo, Finidori, Gonzalez, Arpin, Ivanov, Adesnik, and Sabatini.
Iwamoto, M. *See* Kato, Iwamoto, Koike, and Suzuki.
Iwane, M. *See* Sotoh, Iwane, Matsuzaki, Kikuchi, and Ikai.
Iwanij, V., Hull, B. E., and Jamieson, J. D. Structural characterization of a rat acinar cell tumor. 95:727.
—, **and Jamieson, J. D.** Biochemical analysis of secretory proteins synthesized by normal rat pancreas and by pancreatic acinar tumor cells. 95:734.
—, **and Jamieson, J. D.** Comparison of secretory protein profiles in developing rat pancreatic rudiments and rat acinar tumor cells. 95:742.
Iwata, H. *See* Takeda, Iwata, Suzuki, Brown, and Kimata.
Izant, J. G., Weatherbee, J. A., and McIntosh, J. R. A microtubule-associated protein antigen unique to mitotic spindle microtubules in PtK_1 cells. 96:424.
— *See* Weatherbee, Sherline, Mascardo, Izant, Luftig, and Weihing.
Izumo, S. *See* Narusawa, Fitzsimons, Izumo, Nadal-Ginard, Rubinstein, and Kelly.
— *See* Taubman, Smith, Izumo, Grant, Endo, Andreadis, and Nadal-Ginard.
Izzard, C. S. *See* DePasquale and Izzard.

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Jaakkola, S., Peltonen, J., and Uitto, J. J. Perineurial cells coexpress genes encoding interstitial collagens and basement membrane zone components. 108:1157.
Jacklet, A. *See* Nichols, Jacklet, and Rikmenspoel.
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—, **Ward, K. K., and Haggerty, J. G.** Mild proteolytic digestion restores exocytotic activity to *N*-ethylmaleimide-inactivated cell surface complex from sea urchin eggs. 101:6.
— *See* Crabb and Jackson.
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Jackson, W. T., and Doyle, B. G. Membrane distribution in dividing endosperm cells of *Haemanthus*. 94:637.
— *See* Euteneuer, Jackson, and McIntosh.
— *See* Wolniak, Hepler, and Jackson.
Jacob, F. *See* Pfeiffer, Jakob, Mikoshiba, Dubois, Guenet, Nicolas, Gaillard, Chevance, and Jacob.
Jacob, J. S., and Miller, K. R. The effects of galactolipid depletion on the structure of a photosynthetic membrane. 103:1337.
— *See* Miller and Jacob.
Jacob, M. H., and Berg, D. K. Effects of preganglionic denervation and postganglionic axotomy on acetylcholine receptors in the chick ciliary ganglion. 105:1847.
—, **Lindstrom, J. M., and Berg, D. K.** Surface and intracellular distribution of a putative neuronal nicotinic acetylcholine receptor. 103:205.
Jacobs, C. W., Adams, A. E. M., Szaniszlo, P. J., and Pringle, J. R. Functions of microtubules in the *Saccharomyces cerevisiae* cell cycle. 107:1409.
Jacobs, J. R., and Stevens, J. K. Changes in the organization of the neuritic cytoskeleton during nerve growth factor–activated differentiation of PC12 cells: a serial electron microscopic study of the development and control of neurite shape. 103:895.
—, **and Stevens, J. K.** Experimental modification of PC12 neurite shape with the microtubule-depolymerizing drug nocodazole: a serial electron microscopic study of neurite shape control. 103:907.
— *See* Sasaki-Sherrington, Jacobs, and Stevens.
Jacobs-Cohen, R. J. *See* Anthony, Jacobs-Cohen, Marazzi, and Rubin.
Jacobson, K., O'Dell, D., and August J. T. Lateral diffusion of an 80,000-mol-wt glycoprotein in the plasma membrane of murine fibroblasts: relationships to cell surface and function. 99:1624.
—, **O'Dell, D., Holifield, B., Murphy, T. L., and August, J. T.** Redistribution of a major cell surface glycoprotein during cell movement. 99:1613.
— *See* Duband, Nuckolls, Ishihara, Hasegawa, Yamada, Thiery, and Jacobson.
— *See* Ishihara, Holifield, and Jacobson.
— *See* Scullion, Hou, Puddington, Rose, and Jacobson.
Jacobson, K. A. *See* Wojcieszyn, Schlegel, Lumley-Sapanski, and Jacobson.
Jacoby, R. *See* Scheele, Jacoby, and Carne.
Jacques, Y. V. *See* Stenberg, McEver, Shuman, Jacques, and Bainton.
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Jaffe, E. A. *See* Gross, Moscatelli, Jaffe, and Rifkin.
— *See* Mosher, Doyle, and Jaffe.
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— *See* Tilney and Jaffe.
— *See* Turner, Jaffe, and Fein.
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— *See* Navone, Di Gioia, Jahn, Browning, Greengard, and De Camilli.
— *See* Navone, Jahn, Di Gioia, Stukenbrok, Greengard, and De Camilli.
— *See* Valtorta, Jahn, Fesce, Greengard, and Ceccarelli.
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— *See* Baumann, Hou, and Jahreis.
— *See* Baumann and Jahreis.
— *See* Baumann, Jahreis, and Gaines.
Jaken, S., and Black, P. H. Correlation between a specific molecular weight form of plasminogen activator and metabolic activity of 3T3 cells. 90:721.
—, **and Black, P. H.** Regulation of plasminogen activator in 3T3 cells: effect of phorbol myristate acetate on subcellular distribution and molecular weight. 90:727.
—, **Leach, K., and Klauck, T.** Association of type 3 protein kinase C with focal contacts in rat embryo fibroblasts. 109:697.
— *See* Leach, Powers, Ruff, Jaken, and Kaufmann.
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Jakubowski, M. L. *See* Kanwar, Hascall, Jakubowski, and Gibbons.
Jalkanen, M., Nguyen, H., Rapraeger, A., Kurn, N., and Bernfield, M. Heparan sulfate proteoglycans from mouse mammary epithelial cells: localization on the cell surface with a monoclonal antibody. 101:976.
—, **Rapraeger, A., and Bernfield, M.** Mouse mammary epithelial cells

produce basement membrane and cell surface heparan sulfate proteoglycans containing distinct core proteins. 106:953.
—, **Rapraeger, A., Saunders, S., and Bernfield, M.** Cell surface proteoglycan of mouse mammary epithelial cells is shed by cleavage of its matrix-binding ectodomain from its membrane-associated domain. 105:3087.
— *See* Rapraeger, Jalkanen, and Bernfield.
— *See* Saunders, Jalkanen, O'Farrell, and Bernfield.
— *See* Vainio, Jalkanen, and Thesleff.
Jalkanen, S., Bargatze, R. F., de los Toyos, J., and Butcher, E. C. Lymphocytes recognition of high endothelium: antibodies to distinct epitopes of an 85–95 kD glycoprotein antigen differentially inhibit lymphocyte binding to lymph node, mucosal, or synovial endothelial cells. 105:983.
— *See* Wu, Jalkanen, Streeter, and Butcher.
James, M. *See* Ouellette, Greco, James, Frederick, Naftilan, and Fallon.
James, T. W., and Bohman, R. Proliferation of mitochondria during the cell cycle of the human cell line (HL-60). 89:256.
Jamieson, G. A., Jr., Frazier, W. A., and Schlesinger, P. H. Transient increase in intracellular pH during *Dictyostelium* differentiation. 99:1883.
— *See* Blum, Hayes, Jamieson, and Vanaman.
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— *See* Freedman and Jamieson.
— *See* Gorelick, Cohn, Freedman, Delahunt, Gershoni, and Jamieson.
— *See* Iwanij, Hull, and Jamieson.
— *See* Iwanij and Jamieson.
— *See* Maylie-Pfenninger, and Jamieson.
— *See* Rosenzweig, Madison, and Jamieson.
— *See* Rosenzweig, Miller, and Jamieson.
— *See* Smith, D'Eugenio-Gumkowski, Yanagisawa, and Jamieson.
Jamrich, M. *See* Christensen, LeStourgeon, Jamrich, Howard, Serunian, Silver, and Elgin.
Janero, D. R., and Barrnett, R. Thylakoid membrane biogenesis in *Chlamydomonas reinhardtii* 137$^+$: cell cycle variations in the synthesis and assembly of polar glycerolipid. 91:126.
—, **and Barrnett, R.** Thylakoid membrane biogenesis in *Chlamydomonas reinhardtii* 137$^+$. II. Cell-cycle variations in the synthesis and assembly of pigment. 93:411.
Janicke, M. A., and LaFountain, J. R., Jr. Malorientation in half-bivalents at anaphase: analysis of autosomal laggards in untreated, cold-treated, and cold-recovering crane fly spermatocytes. 98:859.
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— *See* Kwiatkowski, Janmey, and Yin.
— *See* Lind, Janmey, Chaponnier, Herbert, and Stossel.
— *See* Yin, Iida, and Janmey.
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— *See* Franke, Winter, Grund, Schmid, Schiller, and Jarasch.
Jarett, L. *See* Smith and Jarett.
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Jarrell, J. A. *See* Mills, Macknight, Jarrell, Dayer, and Ausiello.
Jarvik, J. W., and Rosenbaum, J. L. Oversized flagellar membrane protein in paralyzed mutants of *Chlamydomonas reinhardtii*. 85:258.
— *See* Adams, Wright, and Jarvik.
— *See* Hoops, Wright, Jarvik, and Witman.
— *See* Kuchka and Jarvik.
— *See* Wright, Chojnacki, and Jarvik.
— *See* Wright, Salisbury, and Jarvik.
Jascur, T. *See* Hwang, Jascur, Vestweber, Pon, and Schatz.
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Javors, J. *See* Kim, Stellmach, Javors, and Fuchs.
Jefferson, D. M. *See* Gatmaitan, Jefferson, Ruiz-Opazo, Biempica, Arias, Dudas, Leinwand, and Reid.
Jefferson, L. S. *See* Baker, Jefferson, and Shiman.
Jeffery, W. R. Messenger RNA in the cytoskeletal framework: analysis by *in situ* hybridization. 95:1.
Jeffrey, J. J. *See* Blair, Kahn, Crouch, Jeffrey, and Teitelbaum.
— *See* Bunge, Williams, Wood, Uitto, and Jeffrey.
Jeltsch, J.-M. *See* Arpin, Pringault, Finidori, Garcia, Jeltsch, Vandekereckhove, and Louvard.
Jemiolo, D. K. *See* Keller, Jemiolo, Burgess, and Rebhun.
Jenkison, M. *See* Ecob-Prince, Jenkison, Butler-Browne, and Whalen.
Jennings, L. K. *See* Phillips, Jennings, and Edwards.
Jennings, P. R. *See* Danpure, Cooper, Wise, and Jennings.
Jensen, C. G. Dynamics of spindle microtubule organization: kinetochore fiber microtubules of plant endosperm. 92:540.
—, **and Smaill, B. H.** Analysis of the spatial organization of microtubule-associated proteins. 103:559.
Jensen, K. H., Herrin, D. L., Plumley, F. G., and Schmidt, G. W. Biogenesis of photosystem II complexes: transcriptional, translational, and posttranslational regulation. 103:1315.
Jensen, L. C. W. *See* Rieder, Davison, Jensen, Cassimeris, and Salmon.
Jensen, R. H. *See* Chasis, Reid, Jensen, and Mohandas.
Jentoft, J. E., and Town, C. D. Intracellular pH in *Dictyostelium discoideum*: a ^{31}P nuclear magnetic resonance study. 101:778.
Jerdan, J. A., Varner, H. H., Greenberg, J. H., Horn, V. J., and Martin, G. R. Isolation and characterization of a factor from calf serum that promotes the pigmentation of embryonic and transformed melanocytes. 100:1493.
Jesaitis, A. J., Bokoch, G. M., Tolley, J. O., and Allen, R. A. Lateral segregation of neutrophil chemotactic receptors into actin- and fodrin-rich plasma membrane microdomains depleted in guanyl nucleotide regulatory proteins. 107:921.
—, **Naemura, J. R., Sklar, L. A., Cochrane, C. G., and Painter, R. G.** Rapid modulation of *N*-formyl chemotactic peptide receptors on the surface of human granulocytes: formation of high-affinity ligand-receptor complexes in transient association with cell cytoskeleton. 98:1378.
—, **Tolley, J. O., Bokoch, G. M., and Allen, R. A.** Regulation of chemoattractant receptor interaction with transducing proteins by organization control in the plasma membrane of human neutrophils. 109:2783.
—, **and Yguerabide, J.** Lateral mobility of the (Na^+,K^+)-dependent ATPase in Madin-Darby canine kidney cells. 102:1256.
Jesaitis, L. *See* Goodenough, Paul, and Jesaitis.
Jesaitis, L. A. *See* Anderson, Stevenson, Jesaitis, Goodenough, and Mooseker.
Jessell, T. M. *See* Yamamoto, Steinbusch, and Jessell.
Jessen, K. R., Morgan, L., Brammer, M., and Mirsky, R. Galactocerebroside is expressed by non-myelin-forming Schwann cells in situ. 101:1135.
Ji, S. *See* Lemasters, Stemkowski, Ji, and Thurman.
Jiang, L. *See* Schindler and Jiang.
Jiang, L.-W., and Schindler, M. Chemical factors that influence nucleocytoplasmic transport: a fluorescence photobleaching study. 102:853.
—, **and Schindler, M.** Nuclear transport in 3T3 fibroblasts: effects of growth factors, transformation, and cell shape. 106:13.
— *See* Baron-Epel, Hernandez, Jiang, Meiners, and Schindler.
— *See* Schindle and Jiang.
Jiang, W. *See* Burgess, Jiang, Mamajiwalla, and Kinsey.
Jingami, H., Brown, M. S., Goldstein, J. L., Anderson, R. G. W., and Luskey, K. L. Partial deletion of membrane-bound domain of 3-hydroxy-3-methyl-glutaryl coenzyme A reductase eliminates sterol-enhanced degradation and prevents formation of crystalloid endoplasmic reticulum. 104:1693.
Jirskog-Hed, B. *See* Oldberg, Jirskog-Hed, Axelsson, and Heingård.
Joab, I. *See* Gase, Renoir, Radanyiu, Joab, Tuohimaa, and Baulieu.
Job, D., Pabion, M., and Margolis, R. L. Generation of microtubule stability subclasses by microtubule-associated proteins: implications for the microtubule "dynamic instability" model. 101:1680.
— *See* Komesli, Tournier, Paintrand, Margolis, Job, and Bornens.
Jochen, A. L., and Berhanu, P. Chymotrypsin substrate analogues inhibit endocytosis of insulin and insulin receptors in adipocytes. 103:1807.
Jockusch, B. M. *See* Hoessli, Rungger-Brändle, Jockusch, and Gabbiani.
— *See* Höner, Citi, Kendrick-Jones, and Jockusch.
— *See* Sanger, Sanger, and Jockusch.
Johansen, K. M., Fehon, R. G., and Artavanis-Tsakonas, S. The *notch* gene product is a glycoprotein expressed on the cell surface of both epidermal and neuronal precursor cells during *Drosophila* development. 109:2427.
Johansson, M. W., and Söderhäll, K. Isolation and purification of a cell adhesion factor from crayfish blood cells. 106:1795.
Johansson, S., and Höök, M. Substrate adhesion of rat hepatocytes on the mechanism of attachment to fibronectin. 98:810.
—, **Kjellen, L., Höök, M., and Timpl, R.** Substrate adhesion of rat hepatocytes: A comparison of laminin and fibronectin as attachment proteins. 90:260.
— *See* Hedin, Bottger, Forsberg, Johansson, and Thyberg.
— *See* LeBaron, Esko, Woods, Johansson, and Höök.
— *See* Perris and Johansson.
John, N. J. *See* Firestone, John, and Yamamoto.
— *See* Haffar, Aponte, Bravo, John, Hess, and Firestone.
John, S. A. *See* Yancey, John, Lal, Austin, and Revel.
Johnson, A. E. *See* Krieg, Johnson, and Walter.
Johnson, C. *See* Sage, Mecham, Johnson, and Bornstein.
Johnson, C. C., Dawson, W. E., Turner, J. T., and Wyche, J. H. Regulation of rat ovarian cell growth and steroid secretion. 86:483.
Johnson, C. H., and Epel, D. Intracellular pH of sea urchin eggs measured by the dimethyloxazolidinedione (DMO) method. 89:284.
—, **Inoué, S., Flint, A., and Hastings, J. W.** Compartmentalization of algal bioluminescence: autofluorescence of bioluminescent particles in the dinoflagellate *Gonyaulax* as studied with image-intensified video

microscopy and flow cytometry. 100:1435.
— *See* Nicolas, Nicolas, Johnson, Bassot, and Hastings.
Johnson, C. S., McKenna, N., and Wang, Y.-L. Association of microinjected myosin and its subfragments with myefibrils in living muscle cells. 107:2213.
— *See* McKenna, Johnson, and Wang.
Johnson, E. M. *See* Cheung, Drivas, Littau, and Johnson.
Johnson, E. M., Jr. *See* DiStefano, Schweitzer, Taniuchi, and Johnson.
— *See* Martin, Schmidt, DiStefano, Lowry, Carter, and Johnson.
— *See* Taniuchi and Johnson.
Johnson, K. A., and Wall, J. S. Structure and molecular weight of the dynein ATPase. 96:669.
— *See* Marchese-Ragona, Wall, and Johnson.
Johnson, K. R., Lampe, P. D., Hur, K. C., Louis, C. F., and Johnson, R. G. A lens intercellular junction protein, MP26, is a phosphoprotein. 102:1334.
— *See* Disney, Johnson, Magnuson, Sylvester, and Reeves.
— *See* Sas, Sas, Johnson, Menko, and Johnson.
Johnson, L. K. *See* Leitman, Benson, and Johnson.
— *See* Longenecker, Kilty, and Johnson.
Johnson, L. V., Walsh, M. L., Bockus, B. J., and Chen, L. B. Monitoring of relative mitochondrial membrane potential in living cells by fluorescence microscopy. 88:526.
Johnson, M. H., and Ziomek, C. A. Induction of polarity in mouse 8-cell blastomeres: specificity, geometry, and stability. 91:303.
— *See* Fleming, McConnell, Johnson, and Stevenson.
Johnson, M. I., Paik, K., and Higgins, D. Rapid changes in synaptic vesicle cytochemistry after depolarization of cultured cholinergic sympathetic neurons. 101:217.
—, Ross, C. D., and Bunge, R., P. Morphological and biochemical studies on the development of cholinergic properties in cultured sympathetic neurons. II. Dependence on postnatal age. 84:692.
—, Ross, C. D., Meyers, M., Spitznagel, E. L., and Bunge, R. P. Morphological and biochemical studies on the development of cholinergic properties in cultured sympathetic neurons. I. Correlative changes in choline acetyltransferase and synaptic vesicle cytochemistry. 84:680.
Johnson, M. P. *See* Pfenninger and Johnson.
Johnson, R. G. *See* Atkinson, Menko, Johnson, Sheppard, and Sheridan.
— *See* Johnson, Lampe, Hur, Louis, and Johnson.
— *See* Sas, Sas, Johnson, Menko, and Johnson.
Johnson, R. J. *See* Subjeck, Shyy, Shen, and Johnson.
Johnson, R. M., Taylor G., and Meyer, D. B. Shape and volume changes in erythrocyte ghosts and spectrin-actin networks. 86:371.
Johnson, T. C. *See* Charp, Kinders, and Johnson.
Johnson, W. *See* Schreiber, Kenney, Kowalski, Thomas, Giminez-Gallego, Rios-Candelore, Di Salvo, Barritault, Courty, Courtois, Moenner, Loret, Burgess, Mehlman, Friesel, Johnson, and Maciag.
Johnson-Wint, B., and Gross, J. Regulation of connective tissue collagenase production: stimulators from adult and fetal epidermal cells. 98:90.
Johnston, G. C. *See* Singer, Bedard, and Johnston.
Johnstone, R. M. *See* Pan, Teng, Wu, Adam, and Johnstone.
Joiner, K. A., Ganz, T., Albert, J., and Rotrosen, D. The opsonizing ligand on *Salmonella typhimurium* influences incorporation of specific, but not azurophil, granule constituents into neutrophil phagosomes. 109:2771.
Jolicoeur, M. *See* Paiement, Jolicoeur, Fazel, and Bergeron.
Joly, J. C., Flynn, G., and Purich, D. L. The microtubule-binding fragment of microtubule-associated protein–2: location of the protease-accessible site and identification of an assembly-promoting peptide. 109:2289.
Jones, A. *See* Fisher, Jones, and Roop.
Jones, A. L. *See* Burwen, Barker, Goldman, Hradek, Raper, and Jones.
— *See* Caron, Jones, and Kirschner.
— *See* Schiff, Fisher, Jones, and Underdown.
— *See* Sivle, Hradek, Jones, and Arnaud.
Jones, D. H., Nusbacher, J., and Anderson, C. L. Fe receptor–mediated binding and endocytosis by human mononuclear phagocytes: monomeric IgG is not endocytosed by U937 cells and monocytes. 100:558.
Jones, E. A. *See* Colman, Jones, and Heasman.
Jones, E. W. *See* Moehle, Dixon, and Jones.
— *See* Preston, Murphy, and Jones.
Jones, G. E., Arumugham, R. G., and Tanzer, M. L. Fibronectin glycosylation modulates fibroblast adhesion and spreading. 103:1663.
— *See* Pizzey, Jones, and Walsh.
Jones, J. C. R., Goldman, A. E., Yang, H.-Y., and Goldman, R. D. The organizational fate of intermediate filament networks in two epithelial cell types during mitosis. 100:93.
—, and Goldman, R. D. Intermediate filaments and the initiation of desmosome assembly. 101:506.
—, Yokoo, K. M., and Goldman, R. D. Further analysis of pemphigus autoantibodies and their use in studies on the heterogeneity, structure, and function of desmosomes. 102:1109.
— *See* Green, Geiger, Jones, Talian, and Goldman.
— *See* Klatte, Kurpakus, Grelling, and Jones.
— *See* Zackroff, Goldman, Jones, Steinert, and Goldman.
Jones, K. B. *See* Adlakha, Shipley, Zhao, Jones, Wright, Rao, and Sauer.
Jones, L. N., and Pope, F. M. Isolation of intermediate filament assemblies from human hair follicles. 101:1569.
Jones, L. R. *See* Jorgensen and Jones.
Jones, O. T. G. *See* Roberts, Cross, Jones, and Segal.
Jones, P., Jackson, R., Price, G. J., Patel, B., Ohanion, V., Lear, A. L., and Critchley, D. R. Identification of a talin binding site in the cytoskeletal protein vinculin. 109:2917.
Jones, R. *See* Brown, von Glos, and Jones.
Jones, R. E., Okamura, C. S., and Martin, T. E. Immunofluorescent localization of the proteins of nuclear ribonucleoprotein complexes. 86:235.
Jones, R. N. *See* Davison and Jones.
Jones, W. R., III. *See* O'Morchoe, Jones, Jarosz, O'Morchoe, and Fox.
Jones-Villeneuve, E. M. V., McBurney, M. W., Rogers, K. A., and Kalnins, V. I. Retinoic acid induces embryonal carcinoma cells to differentiate into neurons and glial cells. 94:253.
Jorcano, J. L. *See* Knapp, Franke, Heid, Hatzfeld, Jorcano, and Moll.
Jordan, A. E. *See* Siegel, Jordan, and Miller.
Jordan, B. R. *See* Nguyen, Mattei, Mattei, Santoni, Goridis, and Jordan.
Jordan, M. A. *See* Farrell, Jordan, Miller, and Wilson.
Jorgensen, A. O., and Campbell, K. P. Evidence for the presence of calsequestrin in two structurally different regions of myocardial sarcoplasmic reticulum. 98:1597.
—, and Jones, L. R. Immunoelectron microscopical localization of phospholamban in adult canine ventricular muscle. 104:1343.
—, Shen, A. C-Y., Arnold, W., Leung, A. T., and Campbell, K. P. Subcellular distribution of the 1, 4-dihydropyridine receptor in rabbit skeletal muscle in situ: an immunofluorescence and immunocolloidal gold-labeling study. 109:135.
—, Shen, A. C.-Y, and Campbell, K. P. Ultrastructural localization of calsequestrin in adult rat atrial and ventricular muscle cells. 101:257.
—, Shen, A. C.-Y., Campbell, K. P., and MacLennan, D. H. Ultrastructural localization of calsequestrin in rat skeletal muscle by immunoferritin labeling of ultrathin frozen sections. 97:1573.
—, Shen, A. C.-Y., Daly, P., and MacLennan, D. H. Localization of Ca^{2+} Mg^{2+}-ATPase of the sarcoplasmic reticulum in adult rat papillary muscle. 93:883.
—, Shen, A. C.-Y., MacLennan, D. H., and Tokuyasu, K. T. Ultrastructural localization of the Ca^{++} plus MG^{++}-dependent ATPase of sarcoplasmic reticulum in rat skeletal muscle by immunoferritin labeling of ultrathin frozen sections. 92:409.
Jorgensen, J. L. *See* Rheinwald, Jorgensen, Hahn, Terpstra, O'Connell, and Plummer.
Jorgensen, P. L. *See* Skriver, Maunsbach, and Jorgensen.
Jorgensen, T. *See* Yang, Kirkland, Jorgensen, and Furmanski.
Joseph, S. K. *See* Busa, Ferguson, Joseph, Williamson, and Nuccitelli.
Joseph-Silverstein, J., and Cohen, W. D. The cytoskeletal system of nucleated erythrocytes. III. Marginal band function in mature cells. 98:2118.
—, Consigli, S. A., Lyser, K. M., and Ver Pault, C. Basic fibroblast growth factor in the chick embryo: immunolocalization to striated muscle cells and their precursors. 108:2459.
— *See* Nemhauser, Joseph-Silverstein, and Cohen.
Josephs, R. *See* Shen, Josephs, and Steck.
Joshi, H. C., Chu, D., Buxbaum, R. E., and Heidemann, S. R. Tension and compression in the cytoskeleton of PC 12 neurites. 101:697.
—, and Cleveland, D. W. Differential utilization of β-tubulin isotypes in differentiating neurites. 109:663.
—, Yen, T. J., and Cleveland, D. W. In vivo coassembly of a divergent β-tubulin subunit (cβ6) into microtubules of different function. 105:2179.
— *See* Dennerll, Joshi, Steel, Buxbaum, and Heidenmann.
— *See* Heidemann, Joshi, Shechter, Fletcher, and Bothwell.
Jovin, T. M. *See* Arndt-Jovin, Robert-Nicoud, Baurschmidt, and Jovin.
— *See* Defize, Arndt-Jovin, Jovin, Boonstra, Meisenhelder, Hunter, de Hey, and de Laat.
Joyard, J. *See* Dorne, Joyard, Block, and Douce.
Joyce, N. C., Haire, M. F., and Palade, G. E. Contractile proteins in pericytes. I. Immunoperoxidase localization of tropomyosin. 100:1379.
—, Haire, M. F., and Palade, G. E. Contractile proteins in pericytes. II. Immunocytochemical evidence for the presence of two isomyosins in graded concentrations. 100:1387.
Julian, J. *See* Carson, Tang, Julian, and Glasser.
— *See* Glasser, Julian, Decker, Tang, and Carson.
Juliano, L. *See* Schreiner, Bauer, Danilov, Hussein, Sczekan, and Juliano.

Juliano, R. L. *See* Brown and Juliano.
— *See* Danilov and Juliano.
— *See* Harper and Juliano.
Julkunen I. *See* Hedman, Christner, Julkunen, and Vaheri.
Jung, G., Helm, R. M., Carothers Carraway, C. A., and Carraway, K. L. Mechanism of concanavalin A–induced anchorage of the major cell surface glycoproteins to the submembrane cytoskeleton in 13762 ascites mammary adenocarcinoma cells. 98:179.
— *See* Carraway, Cerra, Jung, and Carraway.
Jungalwala, F. B. *See* Künemund, Jungalwala, Fischer, Chou, Keilhauer, and Schachner.
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Just, I. *See* Norgauer, Just, Aktories, and Sklar.

K

Kääriäinen, L., Hashimoto, K., Saraste, J., Virtanen, I., and Penttinen, K. Monensin and FCCP inhibit the intracellular transport of alphavirus membrane glycoproteins. 87:783.
— *See* Kielian, Keränen, Kääriäinen, and Helenius.
Kabaeva, N. V. *See* Shirinsky, Antonov, Birukov, Sobolevsky, Romanov, Kabaeva, Antonova, and Smirnov.
Kabat, D., Gliniak, B., Rohrschneider, L., and Polonoff, E. Cell anchorage determines whether mammary tumor virus glycoproteins are processed for plasma membranes or secretion. 101:2274.
Kabat, E. A. *See* Sung, Kabat, and Chien.
Kabat-Zinn, J., and Singer, R. H. Sea urchin tube feet: unique structures that allow a cytological and molecular approach to the study of actin and its gene expression. 89:109.
Kabbash, L. *See* Nathan, Srimal, Farber, Sanchez, Kabbash, Asch, Gailit, and Wright.
Kabcenell, A. K., and Atkinson, P. H. Processing of the rough endoplasmic reticulum membrane glycoproteins of rotavirus SA11. 101:1270.
— *See* Ruohola, Kabcenell, and Ferro-Novick.
Kachadorian, W. A., Muller, J., and Finkelstein, A. Role of osmotic forces in exocytosis: studies of ADH-induced fusion in toad urinary bladder. 91:584.
— *See* Muller, Kachadorian, and DiScala.
— *See* Rapoport, Kachadorian, Muller, Franki, and Hays.
Kachar, B., Bridgman, P. C., and Reese, T. S. Dynamic shape changes of cytoplasmic organelles translocating along microtubules. 105:1267.
—, **and Reese, T. S.** The mechanism of cytoplasmic streaming in characaen algal cells: sliding of endoplasmic reticulum along actin filaments. 106:1545.
— *See* Bridgman, Kachar, and Reese.
— *See* Da Silva, Torrisi, and Kachar.
Kaczman-Daniel, K. *See* Vertel, Velasco, LaFrance, Walters, and Kaczman-Daniel.
Kaczmarek, L., Calabretta, B., Kao, H.-T., Heintz, N., Nevins, J., and Baserga, R. Control of hsp70 RNA levels in human lymphocytes. 104:183.
Kadish, J. *See* Maciag, Kadish, Wilkins, Stemerman, and Weinstein.
Kaetzel, C. S. *See* Parry, Cullen, Kaetzel, Kramer, and Moss.
Kagan, H. M., Vaccaro, C. A., Bronson, R. E., Tang, S.-S., and Brody, J. S. Ultrastructural immunolocalization of lysyl oxidase in vascular connective tissue. 103:1121.
— *See* Clark, Vaughan, Aiken, and Kagan.
Kahn, A. *See* Bar-Shavit, Kahn, Fenton, and Wilner.
Kahn, A. J. *See* Blair, Kahn, Crouch, Jeffrey, and Teitelbaum.
— *See* Malone, Teitelbaum, Griffin, Senior, and Kahn.
Kahn, C. R. *See* Carpentier, White, Orci, and Kahn.
— *See* Haring, White, Kahn, Kasuga, and Lauris.
Kahn, R. A. *See* Newman, Kahn, and Hines.
Kaiser, D. A., Sato, M., Ebert, R. F., and Pollard, T. D. Purification and characterization of two isoforms of *Acanthamoeba* profilin. 102:221
— *See* Carboni, Conzelman, Adams, Kaiser, Pollard, and Mooseker.
— *See* Earnshaw, Sullivan, Machlin, Cooke, Kaiser, Pollard, Rothfield, and Cleveland.
— *See* Hagen, Kiehart, Kaiser, and Pollard.
— *See* Kiehart, Kaiser, and Pollard.
— *See* Vandekerckhove, Kaiser, and Pollard.
Kaiser, H. W., O'Keefe, E., and Bennett, V. Adducin: Ca^{++}-dependent association with sites of cell-cell contact. 109:557.
Kajtaniak, E. L. *See* Picone, Kajtaniak, Nielsen, Behrendt, Mistronicola, Cubellis, Stoppelli, Pedersen, Danø, and Blasi.
Kakiuchi, S. *See* Tsukita, Tsukita, Ishikawa, Kurokawa, Morimoto, Sobue, and Kakiuchi.
Kalimi, G. H., and Lo, C. W. Communication compartments in the gastrulating mouse embryo. 107:241.
—, **and Lo, C. W.** Gap junctional communication in the extraembryonic tissues of the gastrulating mouse embryo. 109:3015.
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Kalka, T. *See* Ash, Fineman, Kalka, Morgan, and Wire.
Kallenbach, E. *See* Feldherr, Kallenbach, and Schultz.
Kalnins, V. I. *See* Gotlieb, May, Subrahmanyan, and Kalnins.
— *See* Gotlieb, Subrahmanyan, and Kalnins.
— *See* Jones-Villeneuve, McBurney, Rogers, and Kalnins.
Kalnoski, M. H. *See* Otey, Kalnoski, Lessard, and Bulinski.
Kalomiris, E. L., and Bourguignon, L. Y. W. Mouse T lymphoma cells contain a transmembrane glycoprotein (CP85) that binds ankyrin. 106:319.
— *See* Bourguignon, Suchard, and Kalomiris.
Kalousek, F. *See* Horwich, Kalousek, Fenton, Furtak, Pollock, and Rosenberg.
— *See* Sztul, Hendrick, Kraus, Wall, Kalousek, and Rosenberg.
Kalshoven, H. *See* Kooijman, de Wildt, Beumer, van der Vliet, Homan, Kalshoven, Musgrave, and van den Ende.
Kam, Z. *See* Benveniste, Livneh, Schlessinger, and Kam.
— *See* Benveniste, Schlessinger, and Kam.
— *See* Livneh, Benveniste, Prywes, Felder, Kam, and Schlessinger.
Kamarck, M. E. *See* Barnett, Kretschmer, Austen, Goebel, Hart, Elting, and Kamarck.
Kamboj, R. K., Wong, L. M., Lamb, T. Y., and Siu, C.-H. Mapping of a cell-binding domain in the cell adhesion molecule gp80 of *Dictyostelium discoideum*. 107:1835.
Kamel, S. *See* Kennedy, Kamel, Tambone, Vrbova, and Zak.
Kaminer, B. *See* Henson, Begg, Beaulieu, Fishkind, Bonder, Terasaki, Lebeche, and Kaminer.
— *See* Oberdorf, Head, and Kaminer.
Kaminskyj, S. G. W. *See* Meyer, Kaminskyj, and Heath.
Kamiya, R. Mutations at twelve independent loci result in absence of outer dynein arms in *Chlamydomonas reinhardtii*. 107:2253.
—, **and Witman, G.** Submicromolar levels of calcium control the balance of beating between the two flagella in demembranated models of *Chlamydomonas*. 98:97.
— *See* Okagaki and Kamiya.
Kan, F. W. K., and Pinto da Silva, P. Preferential association of glycoproteins to the euchromatin regions of cross-fractured nuclei is revealed by fracture-label. 102:576.
— *See* Bennett, Kan, and O'Shaughnessy.
— *See* Pinto da Silva and Kan.
Kanai, Y., Takemura, R., Oshima, T., Mori, H., Ihara, Y., Yanagisawa, M., Masaki, T., and Hirokawa, N. Expression of multiple tau isoforms and microtubule bundle formation in fibroblasts tau cDNA. 109:1173.
Kanda, K. *See* Hirokawa, Sobue, Kanda, Harada, and Yorifuji.
Kane, A. B., Stanton, R. P., Raymond, E. G., Dobson, M. E., Knafelc, M. E., and Farber, J. L. Dissociation of intracellular lysosomal rupture from the cell death caused by silica. 87:643.
Kane, P. M., Holowka, D., and Baird, B. Cross-linking of IgE-receptor complexes by rigid bivalent antigens, and 200 Å in length triggers cellular degranulation. 107:969.
— *See* Rothman, Yamashiro, Raymond, Kane, and Stevens.
Kane, R. E. Induction of either contractile or structural actin-based gels in sea urchin egg cytoplasmic extract. 86:803.
— Interconversion of structural and contractile actin gels by insertion of myosin during assembly. 97:1745.
Kaneda, Y., Uchida, T., Mekada, E., Nakanishi, M., and Okada, Y. Entry of diphtheria toxin into cells: possible existence of cellular factor(s) for entry of diphtheria toxin into cells was studied in somatic cell hybrids and hybrid toxins. 98:466.
— *See* Wataya-Kaneda, Kaneda, Sakurai, Sugawa, and Uchida.
Kaneshiro, E. S. *See* Merkel, Kaneshiro, and Gruenstein.
Kanety, H. *See* Miller, Beardmore, Kanety, Schlessinger, and Hopkins.
Kang, A. H. *See* Postlethwaite, Raghow, Stricklin, Poppleton, Seyer, and Kang.
Kanwar, Y. S., Hascall, V. C., and Farquhar, M. G. Partial characterization of newly synthesized proteoglycans isolated from the glomerular basement membrane. 90:527.
—, **Hascall, V. C., Jakubowski, M. L., and Gibbons, J. T.** Effect of β-D-xyloside on glomerular proteoglycans. I. Biochemical studies. 99:715.
—, **Linker, A., and Farquhar, M. G.** Increased permeability of the glomerular basement membrane to ferritin after removal of glycosaminogly-

cans (heparan sulfate) by enzyme digestion. 86:688.
—, **and Rosenzweig, L. J.** Clogging of the glomerular basement membrane. 93:489.
— *See* Courtoy, Kanwar, Hynes, and Farquhar.
— *See* Reeves, Kanwar, and Farquhar.
Kao, C.-Y. Y. *See* Maratos-Flier, Kao, Verdin, and King.
Kao, H.-T. *See* Kaczmarek, Calabretta, Kao, Heintz, Nevins, and Baserga.
Kao, W.-Y., and Case, S. T. A novel giant secretion polypeptide in *Schironomus* salivary glands: implications for another Balbiani ring gene. 101:1044.
Kaplan, A. *See* Wood and Kaplan.
Kaplan, D. R., Colca, J. R., and McDaniel, M. L. Insulin as a surface marker on isolated cells from rat pancreatic islets. 97:433.
Kaplan, G. *See* Clark, Crossland, Kaplan, and Martinez-Hernandez.
Kaplan, J., and Keogh, E. A. Temperature shifts induce the selective loss of alveolar-macrophage plasma membrane components. 94:12.
—, **McVey Ward, D., and Wiley, H. S.** Phenylarsine oxide-induced increase in alveolar macrophage surface receptors: evidence for fusion of internal receptor pools with the cell surface. 101:121.
— *See* Ajioka and Kaplan.
Kaplan, J. G. *See* Chaly, Bladon, Setterfield, Little, Kaplan, and Brown.
Kaplan, M. R., and Simoni, R. D. Intracellular transport of phosphatidylcholine to the plasma membrane. 101:441.
—, **and Simoni, R. D.** Transport of cholesterol from the endoplasmic reticulum to the plasma membrane. 101:446.
Kapoor, R., Sakai, L. Y., Funk, S., Roux, E., Bornstein, P., and Sage, E. H. Type VIII collagen has a restricted distribution in specialized extracellular matrices. 107:721.
Kapprell, H.-P., Owaribe, K., and Franke, W. W. Identification of a basic protein of M_r 75,000 as an accessory desmosomal plaque protein in stratified and complex epithelia. 106:1679.
— *See* Cowin, Kapprell, and Franke.
Kaput, J., Brandriss, M. C., and Prussak-Wieckowska, T. In vitro import of cytochrome *c* peroxidase into the intermembrane space: release of the processed form by intact mitochondria. 109:101.
Kara, U. A. K. *See* Grab, Ito, Kara, and Rovis.
Karanian, P. J. *See* Melmed, Karanian, and Berlin.
Karasek, M. A. *See* Davison, Bensch, and Karasek.
— *See* Fielding, Davison, Karasek, and Fielding.
— *See* Kramer, Bensch, Davison, and Karasek.
Kardami, E., and Fandrich, R. R. Basic fibroblast growth factor in atria and ventricles of the vertebrate heart. 109:1865.
Karess, R. E., and Glover, D. M. *rough deal*: a gene required for proper mitotic segregation in *Drosophila*. 109:2951.
Kargacin, G. J., Cooke, P. H., Abramson, S. B., and Fay, F. S. Periodic organization of the contractile apparatus in smooth muscle revealed by the motion of dense bodies in single cells. 108:1465.
Karnaky, K. J., Jr. *See* Ernst, Dodson, and Karnaky.
Karnovsky, M. J., Kleinfeld, A. M., Hoover, R. L., and Klausner, R. D. Concept of lipid domains in membranes. 94:1.
— *See* Castellot, Addonizio, Rosenberg, and Karnovsky.
— *See* Castellot, Choay, Lormeau, Petitou, Sache, and Karnovsky.
— *See* Castellot, Pukac, Caleb, Wright, and Karnovsky.
— *See* Hoover, Dawidowicz, Robinson, and Karnovsky.
— *See* Ketis, Lawler, Hoover, and Karnovsky.
— *See* Nelson, Andrews, and Karnovsky.
— *See* Robinson, Badwey, Karnovsky, and Karnovsky.
— *See* Robinson and Karnovsky.
— *See* Robinson, Karnovsky, and Karnovsky.
— *See* Robinson, Okada, Castellot, and Karnovsky.
Karnovsky, M. L. *See* Robinson, Badwey, Karnovsky, and Karnovsky.
— *See* Robinson, Karnovsky, and Karnovsky.
Karow, M. L. *See* Salmon, Leslie, Saxton, Karow, and McIntosh.
— *See* Salmon, Saxton, Leslie, Karow, and McIntosh.
Karpas, A. *See* Newburger, Pagano, Greenberger, Karpas, and Cohen.
Karr, T. L., and Alberts, B. M. Organization of the cytoskeleton in early *Drosophila* embryos. 102:1494.
Karsenti, E., Kobayashi, S., Mitchison, T., and Kirschner, M. Role of the centrosome in organizing the interphase microtubule array: properties of cytoplasts containing or lacking centrosomes. 98:1763.
—, **Newport, J., Hubble, R., and Kirschner, M.** The interconversion of metaphase and interphase microtubule arrays, as studied by the injection of centrosomes and nuclei into *Xenopus* eggs. 98:1730.
— *See* Bacallao, Antony, Dotti, Karsenti, Stelzer, and Simons.
— *See* Bré, Kreis, and Karsenti.
— *See* Gounon, and Karsenti.
Kartenbeck, J., Schwechheimer, K., Moll, R., and Franke, W. W. Attachment of vimentin filaments to desmosomal plaques in human meningiomal cells and arachnoidal tissue. 98:1072.
—, **Stuekenbrok, H., and Helenius, A.** Endocytosis of simian virus 40 into the endoplasmic reticulum. 109:2721.
— *See* Froshauer, Kartenbeck, and Helenius.
— *See* Helenius, Kartenbeck, Simons, and Fries.
— *See* Volberg, Geiger, Kartenbeck, and Franke.
— *See* White, Kartenbeck, and Helenius.
Kasai, S. *See* Sudo, Kodama, Amagai, Yamamoto, and Kasai.
Kasambalides, E. J. *See* Lanks and Kasambalides.
Kashgarian, M. *See* Marxer, Stieger, Quaroni, Kashgarian, and Hauri.
— *See* Morrow, Cianci, Ardito, Mann, and Kashgarian.
— *See* Sztul, Biemesderfer, Caplan, Kashgarian, and Boyer.
Kaslow, H. R., Groppi, V. E., Abood, M. E., and Bourne, H. R. Cholera toxin can catalyze ADP-ribosylation of cytoskeletal proteins. 91:410.
Kass, M. E. *See* Flanders, Thompson, Cissel, Van Obberghen-Schilling, Baker, Kass, Ellingsworth, Roberts, and Sporn.
Kassis, S. *See* Spiegel, Kassis, Wilchek, and Fishman.
Kasuga, M. *See* Haring, White, Kahn, Kasuga, and Lauris.
Katamine, S. *See* Notario, Gutkind, Imaizumi, Katamine, and Robbins.
Kataoka, M. *See* Tavassoli, Kishimoto, and Kataoka.
Kato, H. *See* Hanai, Kato, Matsuhashi, Morita, Raines, and Ross.
Kato, K. *See* Kato, Kato, and Goodman.
— *See* Matsuura, Eto, Kato, and Tashiro.
— *See* Rosenfeld, Kreibich, Popov, Kato, and Sabatini.
Kato, M., Kato, K., and Goodman, D. S. Immunocytochemical studies on the localization of plasma and of cellular retinol-binding proteins and of transthyretin (prealbumin) in rat liver and kidney. 98:1696.
—, **Koike, Y., Suzuki, S., and Kimata, K.** Basement membrane proteoglycan in various tissues: characterization using monoclonal antibodies to the Engelbreth-Holm-Swarm mouse tumor low density heparan sulfate proteoglycan. 106:2203.
Kato, Y., and Gospodarowicz, D. Effect of exogenous extracellular matrices on proteoglycan synthesis by cultured rabbit costal chondrocytes. 100:486.
—, **and Gospodarowicz, D.** Sulfated proteoglycan synthesis by confluent cultures of rabbit costal chondrocytes grown in the presence of fibroblast growth factor. 100:477.
—, **Iwamoto, M., Koike, T., and Suzuki, F.** Effect of vanadate on cartilage-matrix proteoglycan synthesis in rabbit costal chondrocyte cultures. 104:311.
Katoh, T., and Lowey, S. Mapping myosin light chains by immunoelectron microscopy. Use of anti-fluorescyl antibodies as structural probes. 109:1549.
Katow, H., and Hayashi, M. Role of fibronectin in primary mesenchyme cell migration in the sea urchin. 101:1487.
Katsumaru, H. *See* Fukui, and Katsumaru.
Katz, E. R. *See* White, Tolbert, and Katz.
Katz, W. *See* Kim, Magendantz, Katz, and Solomon.
Kaufman, R., Frösch, D., Westphal, C., Weber, L., and Klein, C. E. Integrin VLA-3: ultrastructural localization at cell–cell contact sites of human cell cultures. 109:1807.
Kaufman, R. J. *See* Dorner, Bole, and Kaufman.
Kaufman, S. J., Foster, R. F., Haye, K. R., and Faiman, L. E. Expression of a developmentally regulated antigen on the surface of skeletal and cardiac muscle cells. 100:1977.
Kaufman, T. C. *See* Fuller, Caulton, Hutchens, Kaufman, and Raff.
Kaufmann, S. *See* Leach, Powers, Ruff, Jaken, and Kaufmann.
Kawai, Y. *See* Newman, Kawai, Montgomery, and Kunicki.
Kawakami, A. *See* Hirano, Nose, Hatta, Kawakimi, and Takeichi.
Kawamoto, R. M., Brunschwig, J.-P., Kim, K. C., and Caswell, A. H. Isolation, characterization, and localization of the spanning protein from skeletal muscle triads. 103:1405.
Kawashima, M. *See* Takano-Ohmuro, Obinata, Kawashima, Masaki, and Tanaka.
Kawilarang-de Haas, E. W. M. *See* Nijweide, van Iperen-van Gent, Kawilarang-de Haas, van der Plas, and Wassenaar.
Kawka, D. W. *See* Singer, Kawka, Kazazis, and Clark.
— *See* Singer, Kawka, Scott, Mumford, and Lark.
— *See* Singer, Scott, Kawka, and Kazazis.
— *See* Singer, Scott, Kawka, Kazazis, Gailit, and Ruoslahti.
Kay, B. K., Schmidt, O., and Gall, J. G. In vitro transcription of cloned 5S RNA genes of the newt *Notophthalmus*. 90:323.
—, **Shah, A. J., and Halstead, W. E.** Expression of the Ca^{2+}-binding protein, parvalbumin, during embryonic development of the frog, *Xenopus laevis*. 104:841.
Kay, D. G. *See* Lai, Cameron, Wada, Doherty, Kay, Posner, and Bergeron.
Kay, E. S. *See* Weidman, Kay, and Shapiro.
Kayman, S. C., and Clarke, M. Relationship between axenic growth of *Dictyostelium discoideum* strains and their track morphology on substrates coated with gold particles. 97:1001.

—, **Reichel, M., and Clarke, M.** Motility mutants of *Dictyostelium discoideum*. 93:705.
Kayne, M. *See* Urban, Parczyk, Leutz, Kayne, and Kondor-Koch.
Kazazis, D. M. *See* Singer, Kawka, Kazazis, and Clark.
— *See* Singer, Scott, Kawka, and Kazazis.
— *See* Singer, Scott, Kawka, Kazazis, Gailit, and Ruoslahti.
Kazlauskas, A., and Cooper, J. A. Protein kinase C mediates platelet-derived growth factor-induced tyrosine phosphorylation of p42. 106:1395.
Keane, R. W., Mehta, P. P., Rose, B., Honig, L. S., Loewenstein, W. R., and Rutishauser, U. Neural differentiation, NCAM-mediated adhesion, and gap junctional communication in neuroectoderm. A study in vitro. 106:1307.
— *See* Tedeschi, Barrett, and Keane.
Kearney, J. F. *See* Bole, Hendershot, and Kearney.
— *See* Hendershot, Bole, Köhler, and Kearney.
Kedersha, N. L., Hill, D. F., Kronquist, K. E., and Rome, L. H. Subpopulations of liver coated vesicles resolved by preparative agarose gel electrophoresis. 103:287.
—, **and Rome, L. H.** Isolation and characterization of a novel ribonucleoprotein particle: large structures contain a single species of small RNA. 103:699.
— *See* Lemansky, Hasilik, von Figura, Helmy, Fishman, Fine, Kedersha, and Rome.
Kedes, L. *See* Hardeman, Minty, Benton-Vosman, Kedes, and Blau.
Kedinger, M. *See* Gorr, Stieger, Fransen, Kedinger, Marxer, and Hauri.
— *See* Simon-Assmann, Bouziges, Vigny, and Kedinger.
Keegstra, K. *See* Mishkind, Raikhel, Palevitz, and Keegstra.
Keen, J. *See* Heuser and Keen.
Keen, J. H. Clathrin assembly proteins: affinity purification and a model for coat assembly. 105:1989.
—, **and Black, M. M.** The phosphorylation of coated membrane proteins in intact neurons. 102:1325.
— *See* Heuser, Keen, Amende, Lippoldt, and Prasad.
— *See* Zaremba and Keen.
Keenan, T. W. *See* Franke, Heid, Grund, Winter, Freudenstein, Schmid, Jarasch, and Keenan.
— *See* Franke, Schmid, Freudenstein, Appelhans, Osborn, Weber, and Keenan.
Keene, D. *See* Pearl, Fishkind, Mooseker, Keene, and Keller.
Keene, D. R., Engvall, E., and Glanville, R. W. Ultrastructure of type VI collagen in human skin and cartilage suggests an anchoring function for this filamentous network. 107:1995.
—, **Sakai, L. Y., Bachinger, H. P., and Burgeson, R. E.** Type III collagen can be present on banded collagen fibrils regardless of fibril diameter. 105:2393.
—, **Sakai, L. Y., Lunstrum, G. P., Morris, N. P., and Burgeson, R. E.** Type VII collagen forms an extended network of anchoring fibrils. 104:611.
— *See* Sakai, Keene, and Engvall.
— *See* Sakai, Keene, Morris, and Burgeson.
Kefalides, N. A. *See* Haverty, Kelly, Hines, Amenta, Watanabe, Harper, Kefalides, and Neilson.
Keilhauer, G. *See* Künemund, Jungalwala, Fischer, Chou, Keilhauer, and Schachner.
— *See* Poltorak, Sadoul, Keilhauer, Landa, Fahrig, and Schachner.
Keith, C., DiPaola, M., Maxfield, F. R., and Shelanski, M. L. Microinjection of Ca^{++}-calmodulin causes a localized depolymerization of microtubules. 97:1916.
Keith, C. H., Feramisco, J. R., and Shelanski, M. Direct visualization of fluorescein-labeled microtubules in vitro and in microinjected fibroblasts. 88:234.
— *See* Kruskal, Keith, and Maxfield.
— *See* Tycko, Keith, and Maxfield.
Kellems, R. E., Harper, M. E., and Smith, L. M. Amplified dihydrofolate reductase genes are located in chromosome regions containing DNA that replicates during the first half of S-phase. 92:531.
— *See* Leys, Crouse, and Kellems.
Keller, B. J. *See* Hoober, Marks, Keller, and Margulies.
Keller, D. S. *See* Balch, Wagner, and Keller.
— *See* Doms, Keller, Helenius, and Balch.
Keller, G. A., Pazirandeh, M., and Krisans, S. 3-Hydroxy-3-methylglutaryl coenzyme A reductase localization in rat liver perixosomes and microsomes of control and cholestyramine-treated animals: quantitative biochemical and immunoelectron microscopical analyses. 103:875.
—, **Scallen, T. J., Clarke, D., Maher, P. A., Krisans, S. K., and Singer, S. J.** Subcellular localization of sterol carrier protein-2 in rat hepatocytes: its primary localization to peroxisomes. 108:1353.
Keller, G.-A. *See* Gould, Keller, Hosken, Wilkinson, and Subramani.
— *See* Gould, Keller, and Subramani.
Keller, J. M. *See* Stamatoglou and Keller.
Keller, L. R., Schloss, J. A., Sillflow, C. D., and Rosenbaum, J. L. Transcription of α- and β-tubulin genes in vitro in isolated *Chlamydomonas reinhardi* nuclei. 98:1138.
Keller, T. III. *See* Pearl, Fishkind, Mooseker, Keene, and Keller.
Keller, T. C. S. III, Conzelman, K. A., Chasan, R., and Mooseker, M. S. Role of myosin in terminal web contraction in isolated intestinal epithelial brush borders. 100:1647.
—, **Jemiolo, D. K., Burgess, W. H., and Rebhun, L. I.** *Strongylocentrotus purpuratus* spindle tubulin. II. Characteristics of its sensitivity to Ca^{++} and the effects of calmodulin isolated from bovine brain and *S. purpuratus* eggs. 93:797.
—, **and Mooseker, M. S.** Ca^{++}-Calmodulin-dependent phosphorylation of myosin and its role in brush border contraction in vitro. 95:943.
—, **and Rebhun, L. I.** *Strongylocentrotus purpuratus* spindle tubulin. I. Characteristics of its polymerization and depolymerization in vitro. 93:788.
— *See* Hirokawa, Keller, Chasan, and Mooseker.
Kelley, C., D'Amore, P., Hechtman, H. B., and Shepro, D. Microvascular pericyte contractility in vitro: comparison with other cells of the vascular wall. 104:483.
Kelley, D. G. *See* McDonald and Kelley.
— *See* McDonald, Kelley, and Broekelmann.
— *See* Villiger, Kelley, Ergleman, Kuhn, and McDonald.
Kelley, R. B. *See* Buckley and Kelley.
Kellie, S., Patel, B., Pierce, E. J., and Critchley, D. R. Capping cholera toxin-ganglioside GM_1 complexes on mouse lymphocytes is accompanied by co-capping of α-actinin. 97:447.
Kellogg, D. *See* Drubin, Kobayashi, Kellogg, and Kirschner.
Kellogg, D. R., Field, C. M., and Alberts, B. M. Identification of microtubule-associated proteins in the centrosome, spindle and kinetochore of the early *Drosophila* embryo. 109:2977.
Kelly, A. M. *See* Narusawa, Fitzsimons, Izumo, Nadal-Ginard, Rubinstein, and Kelly.
— *See* Rubinstein and Kelly.
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Kelly, C. M. *See* Gerstenfeld, Chipman, Kelly, Hodgens, Lee, and Landis.
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— *See* Burgess, Craik, and Kelly.
— *See* Burgess, Craik, Matsuuchi, and Kelly.
— *See* Burgess and Kelly.
— *See* Carlson, Caroni, and Kelly.
— *See* Carlson and Kelly.
— *See* Hooper, Carlson, and Kelly.
— *See* Lowe, Madeddu, and Kelly.
— *See* Matsuuchi, Buckley, Lowe, and Kelly.
— *See* Miljanich, Brasier, and Kelly.
— *See* Moore, Gumbiner, and Kelly.
— *See* Moore and Kelly.
— *See* Pfeffer, Drubin, and Kelly.
— *See* Pfeffer and Kelly.
— *See* Schroer, Brady, and Kelly.
— *See* Schweitzer and Kelly.
Kelly, S. *See* Glickman, Croen, Kelly, and Al-Awqati.
Kelly, T. *See* Burridge, Kelly, and Mangeat.
— *See* Mueller, Kelly, Dai, Dai, and Chen.
Kelly, W. G., Passaniti, A., Woods, J. W., Daiss, J. L., and Roth, T. F. Tubulin as a molecular component of coated vesicles. 97:1191.
Kelvin, D. J., Simard, G., Sue-A-Quan, A., and Connolly, J. A. Growth factors, signaling pathways, and the regulation of proliferation and differentiation in BC3H1 muscle cells. II. Two signaling pathways distinguished by pertussis toxin and a potential role for the *ras* oncogene. 108:169.
—, **Simard, G., Tai, H. H., Yamaguchi, T. P., and Connolly, J. A.** Growth factors, signaling pathways, and the regulation of proliferation and differentiation in BC3H1 muscle cells. I. A pertussis toxin–sensitive pathway is involved. 108:159.
Kemler, R. *See* Boller, Vestweber, and Kemler.
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Kempf, C. *See* Klausner, van Renswoude, Kempf, Rao, Bateman, and Robbins.
Kendrick-Jones, J. *See* Bennett, Cross, Kendrick-Jones, and Weeds.
— *See* Cande, Tooth, and Kendrick-Jones.
— *See* Citi, Cross, Bagshaw, and Kendrick-Jones.
— *See* Craig, Padrón, and Kendrick-Jones.
— *See* Höner, Citi, Kendrick-Jones, and Jockusch.
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Kenna, M., Amaya, E., and Bloom, K. Selective excision of the centromere chromatin complex from *Saccharomyces cerevisiae*. 107:9.
Kennedy, C. J. R. *See* Roman, LaChance, Broekelmann, Kennedy, Wayner, Carter, and McDonald.
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Kennedy, J. M., Kamel, S., Tambone, W. W., Vrbova, G., and Zak, R. The expression of myosin heavy chain isoforms in normal and hypertrophied chicken slow muscle. 103:977.
Kennel, S. J. *See* Allen, Kennel, Cacheiro, Olins, and Olins.
Kenney, J. *See* Schreiber, Kenney, Kowalski, Thomas, Gimenez-Gallego, Rios-Candelore, Di Salvo, Barritault, Courty, Courtois, Moenner, Loret, Burgess, Mehlman, Friesel, Johnson, and Maciag.
Kenney, L. J. *See* Franzini-Armstrong, Kenney, and Varriano-Marston.
Kensler, R. W., and Goodenough, D. A. Isolation of mouse myocardial gap junctions. 86:755.
—, and Levine, R. J. C. An electron microscopic and optical diffraction analysis of the structure of *Limulus* telson muscle thick filaments. 92:443.
—, Levine, R. J. C., and Stewart, M. Electron microscopic and optical diffraction analysis of the structure of scorpion muscle thick filaments. 101:395.
—, and Stewart, M. Frog skeletal-muscle thick filaments are three-stranded. 96:1797.
— *See* Levine, Chantler, and Kensler.
— *See* Levine, Kensler, Reedy, Hofmann, and King.
— *See* Stewart, Kensler, and Levine.
Kenter, A. L., Warren, T., Shields, D., and Birshtein, B. K. Mouse myeloma cells that make short immunoglobulin heavy chains: pleiotropic effects on glycosylation and chain assembly. 98:2215.
Keogh, E. A. *See* Kaplan and Keogh.
Keränen, S. *See* Kielian, Keränen, Kääriäinen, and Helenius.
Kerjaschki, D., Noronha-Blob, L., Sacktor, B., and Farquhar, M. G. Microdomains of distinctive glycoprotein composition in the kidney proximal tubule brush border. 98:1505.
—, Sharkey, D. J., and Farquhar, M. G. Identification and characterization of podocalyxin—the major sialoprotein of the renal glomerular epithelial cell. 98:1591.
— *See* Horvat, Hovorka, Dekan, and Kerjaschki.
— *See* Rodman, Kerjaschki, Merisko, and Farquhar.
Kermode, J. C. *See* Becker, Kermode, Naccache, Yassin, Marsh, Munoz, and Sha'afi.
Kern, H. *See* Marsh, Schmid, Kern, Harms, Male, Mellman, and Hellenius.
— *See* Schick, Kern, and Scheele.
Kern, H. F. *See* Tooze, Kern, Fuller, and Howell.
Kersken, H. *See* Momayezi, Lumpert, Kersken, Gras, Plattner, Krinks, and Klee.
— *See* Vilmart-Seuwen, Kersken, Stürzel, and Plattner.
Keryer, G., Ris, H., and Borisy, G. G. Centriole distribution during tripolar mitosis in Chinese hamster ovary cells. 98:2222.
Kesbeke, F., Snaar-Jagalska, B. E., and Van Haastert, P. J. M. Signal transduction in *Dictyostelium FGD* A mutants with a defective interaction between surface cAMP receptor and a GTP-binding regulatory protein. 107:521.
Keski-Oja, J., Blasi, F., Leof, E. B., and Moses, H. L. Regulation of the synthesis and activity of urokinase plasminogen activator in A549 human lung carcinoma cells by transforming growth factor-β. 106:451.
—, Lehto, V. P., and Virtanen, I. Keratin filaments of mouse epithelial cells are rapidly affected by epidermal growth factor. 90:537.
—, Sen, A., and Todaro, G. J. Direct association of fibronectin and actin molecules in vitro. 85:527.
— *See* Laiho, Saksela, Andreasen, and Keski-Oja.
— *See* Lyons, Keski-Oja, and Moses.
Ketis, N. V., Lawler, J., Hoover, R. L., and Karnovsky, M. J. Effects of heat shock on the expression of thrombospondin by endothelial cells in culture. 106:893.
Khairallah, L. *See* Satter, Garber, Khairallah, and Cheng.
Khawaja, S., Gundersen, G. G., and Bulinski, J. C. Enhanced stability of microtubules enriched in detyrosinated tubulin is not a direct function of detyrosination level. 106:141.
— *See* Gundersen, Khawaja, and Bulinski.
Khoury, E. L. Reexpression of blood group ABH antigens on the surface of human thyroid cells in culture. 94:193.
Kidson, C. *See* Saul, Lamont, Sawyer, and Kidson.
Kiehart, D. P. Studies on the in vivo sensitivity of spindle microtubules to calcium ions and evidence for a vesicular calcium-sequestering system. 88:604.
—, and Feghali, R. Cytoplasmic myosin from *Drosophila melanogaster*. 103:1517.
—, Kaiser, D. A., and Pollard, T. D. Direct localization of monoclonal antibody binding sites on *Acanthamoeba* myosin-II and inhibition of filament formation by antibodies that bind to specific sites on the myosin-II tail. 99:1015.
—, Kaiser, D. A., and Pollard, T. D. Monoclonal antibodies demonstrate limited structural homology between myosin isozymes from *Acanthamoeba*. 99:1002.
—, Mabuchi, I., and Inoué, S. Evidence that myosin does not contribute to force production in chromosome movement. 94:165.
—, and Pollard, T. D. Inhibition of *Acanthamoeba* actomysin-II ATPase activity and mechanochemical function. 99:1024.
— *See* Byers, Dubreuil, Branton, Kiehart, and Goldstein.
— *See* Dubreuil, Byers, Branton, Goldstein, and Kiehart.
— *See* Eisen, Kiehart, Wieland, and Reynolds.
— *See* Hagen, Kiehart, Kaiser, and Pollard.
— *See* Pesacreta, Byers, Dubreuil, Kiehart, and Branton.
Kielberg, V. *See* Skriver, Larsson, Kielberg, Nielsen, Andresen, Kristensen, and Dano.
Kielian, M., and Helenius, A. pH-Induced alterations in the fusogenic spike protein of Semliki Forest virus. 101:2284.
— *See* Schmid, Fuchs, Kielian, Helenius, and Mellman.
Kielian, M. C., and Cohn, Z. A. Intralysosomal accumulation of polyanions. II. Polyanion internalization and its influence on lysosomal pH and membrane fluidity. 93:875.
—, and Cohn, Z. A. Phagosome-lysosome fusion. Characterization of intracellular membrane fusion in mouse macrophages. 85:754.
—, Keränen, S., Kääriäinen, L., and Helenius, A. Membrane fusion mutants of Semliki Forest virus. 98:139.
—, Steinman, R. M., and Cohn, Z. A. Intralysosomal accumulation of polyanions. I. Fusion of pinocytic and phagocytic vacuoles with secondary lysosomes. 93:866.
Kierszenbaum, A. L. *See* Abdullah and Kierszenbaum.
Kiger, J. A. *See* Davis and Kiger.
Kiino, D. R., Burger, D. E., and Dannies, P. S. Prolactin storage in a clonal strain of rat pituitary tumor cells is cell-cycle dependent. 93:459.
Kiistala, U. *See* Alitalo, Kuismanen, Myllylä, Kiistala, Asko-Seljavaara, and Vaheri.
Kikuchi, A. *See* Takei, Kikuchi, Kikuchi, Mizumo, and Shimura.
Kikuchi, M. *See* Sotoh, Iwane, Matsuzaki, Kikuchi, and Ikai.
Kikuchi, Y. *See* Takei, Kikuchi, Kikuchi, Mizuno, and Shimura.
Kilejian, A. *See* Olson and Kilejian.
Kilkenny, A. E. *See* Yuspa, Kilkenny, Steinert, and Roop.
Killen, P. D. *See* Laurie, Horikoshi, Killen, Segui-Real, and Yamada.
Kilmartin, J. V., and Adams, A. E. M. Structural rearrangements of tubulin and actin during the cell cycle of the yeast *Saccharomyces*. 98:922.
—, Wright, B., and Milstein, C. Rat monoclonal antitubulin antibodies derived by using a new nonsecreting rat cell line. 93:576.
Kilty, L. A. *See* Longenecker, Kilty, and Johnson.
Kim, D. D. *See* Hennessy, Frazier, Kim, Deckwerth, Baumgartel, Rotwein, and Frazier.
Kim, H. Y. *See* Pepper, Kim, and Berns.
Kim, I. S. *See* Isaacs, Kim, Struve, and Fulton.
Kim, J. W. *See* Markelonis, Oh, Park, Cha, Sofia, Kim, and Azari.
Kim, K. C. *See* Kawamoto, Brunschwig, Kim, and Caswell.
Kim, K. H., Marchuk, D., and Fuchs, E. Expression of unusually large keratins during terminal differentiation: the balance of type I and type II keratins is not disrupted. 99:1872.
—, Stellmach, V., Javors, J., and Fuchs, E. The regulation of human mesothelial cell differentiation: opposing roles of retinoids and epidermal growth factor in the expression of intermediate filament proteins. 105:3039.
— *See* Glass, Kim, and Fuchs.
Kim, K. S. *See* Resendez, Ting, Kim, Wooden, and Lee.
Kim, S., Magendantz, M., Katz, W., and Solomon, F. Development of a differentiated microtubule structure: formation of the chicken erythrocyte marginal band in vivo. 104:51.
Kim, Y.-J., Shuman, J., Sette, M., and Przybyla, A. Arsenate induces stress proteins in cultured rat myoblasts. 96:393.
Kimata, K. *See* Kato, Koike, Suzuki, and Kimata.
— *See* Takeda, Iwata, Suzuki, Brown, and Kimata.
Kimball, B. *See* Detmers, Wright, Olsen, Kimball, and Cohn.
Kimball, J. R. *See* Dale, Holbrook, Kimball, Hoff, and Sun.
Kimura, K.-I. *See* Takei, Oyama, Kimura, Hyodo, Mizuno, and Shimura.
Kimura, S. *See* Maruyama, Sawada, Kimura, Ohashi, Higuchi, and Umazume.
— *See* Maruyama, Yoshioka, Higuchi, Ohashi, Kimura, and Natori.
Kinders, R. J. *See* Charp, Kinders, and Johnson.
Kindle, K. L., Schnell, R. A., Fernández, E., and Lefebvre, P. A. Stable nuclear transformation of *Chlamydomonas* using the *Chlamydomonas* gene for nitrate reductase. 109:2589.
Kindy, M. S. *See* Glenney, Kindy, and Zokas.

King, E. J. *See* Wang, Wissinger, King, and Wang.
King, G. L. *See* Maratos-Flier, Kao, Verdin, and King.
King, H. A. *See* Levine, Kensler, Reedy, Hofmann, and King.
King, I. A., Tabiowo, A., and Fryer, P. R. Evidence that major 78-kD to 44-kD concanavalin A–binding glycopolypeptides in pig epidermis arise from the degradation of desmosomal glycoproteins during terminal differentiation. 105:3053.
King, R. J. B. *See* Darbre and King.
King, S. M., Hyams, J. S., and Luba, A. Absence of microtubule sliding and an analysis of spindle formation and elongation in isolated mitotic spindles from the yeast *Saccharomyces cerevisiae*. 94:341.
—, and Witman, G. B. Structure of the γ heavy chain of the outer arm dynein from *Chlamydomonas* flagella. 107:1799.
Kingsley, D. M., Kozarsky, K. F., Segal, M., and Krieger, M. Three types of low density lipoprotein receptor-deficient mutant have pleiotropic defects in the synthesis of N-linked, O-linked, and lipid-linked carbohydrate chains. 102:1576.
Kinne, R. *See* Eveloff, Haase, and Kinne.
Kinsella, M. G., and Wight, T. N. Modulation of sulfated proteoglycan synthesis by bovine aortic endothelial cells during migration. 102:679.
Kinsey, W. *See* Burgess, Jiang, Mamajiwalla, and Kinsey.
Kinsey, W. H., Decker, G. L., and Lennarz, W. J. Isolation and partial characterization of the plasma membrane of the sea urchin egg. 87:248.
—, and Lennarz, W. J. Isolation of a glycopeptide fraction from the surface of the sea urchin egg that inhibits sperm-egg binding and fertilization. 91:325.
Kintner, C. R. *See* Baldwin, Yoshihara, Blackmer, Kintner, and Burden.
Kirchhausen, T., and Harrison, S. C. Structural domains of clathrin heavy chains. 99:1725.
Kirk, D. L. *See* Green and Kirk.
— *See* Green, Viamontes, and Kirk.
Kirk, R. G. *See* Andrews, Mazurkiewicz, and Kirk.
Kirkland, B. *See* Kistler, Kirkland, and Bullivant.
Kirkland, W. *See* Yang, Kirkland, Jorgensen, and Furmanski.
Kirkness, V. *See* Moore, Thompson, Kirkness, Dickson, and Walsh.
Kirschner, D. A. *See* Hollingshead, Caspar, Melchior, and Kirschner.
Kirschner, M. *See* Drubin, Kobayashi, Kellogg, and Kirschner.
— *See* Evans, Mitchison, and Kirschner.
— *See* Gerhart, Wu, and Kirschner.
— *See* Karsenti, Kobayashi, Mitchison, and Kirschner.
— *See* Karsenti, Newport, Hubble, and Kirschner.
— *See* Kristofferson, Mitchison, and Kirschner.
— *See* Miake-Lye, Newport, and Kirschner.
— *See* Ring, Hubble, and Kirschner.
— *See* Schulze, Asai, Bulinski, and Kirschner.
— *See* Schulze and Kirschner.
Kirschner, M. W. Implications of treadmilling for the stability and polarity of actin and tubulin polymers in vivo. 86:330.
— *See* Caron, Jones, and Kirschner.
— *See* Drubin, Caput, and Kirschner.
— *See* Drubin, Feinstein, Shooter, and Kirschner.
— *See* Drubin and Kirschner.
— *See* Forbes, Kornberg, and Kirschner.
— *See* Gard and Kirschner.
— *See* Heuser and Kirschner.
— *See* Huitorel and Kirschner.
— *See* Mitchison and Kirschner.
Kirshner, N. *See* Phillips, Burridge, Wilson, and Kirshner.
Kishimoto, T. *See* Tavassoli, Kishimoto, and Kataoka.
Kishimoto, Y. *See* Tennekoon, Yoshino, Peden, Bigbee, Rutkowski, Kishimoto, DeVries, and McKhann.
Kiss, G. B. *See* Putnoky, Grosskopf, Cam Ha, Kiss, and Kondorosi.
Kistler, H. B., Jr. *See* Margolis, Marchand, Kistler, and LaVail.
Kistler, J., Duncombe, Y., and Laemmli, U. K. Mapping nucleolar proteins with monoclonal antibodies. 99:1981.
—, Kirkland, B., and Bullivant, S. Identification of a 70,000-D protein in lens membrane junctional domains. 101:28.
— *See* Beyer, Kistler, Paul, and Goodenough.
— *See* Gruijters, Kistler, Bullivant, and Goodenough.
Kistler, W. S. *See* Heidaran, Showman, and Kistler.
Kitson, R. P. *See* Wilcox, Kitson, and Widnell.
Kjellen, L. *See* Johansson, Kjellen, Höök, and Timpl.
Kjéllen, L. *See* Stow, Kjéllen, Unger, Höök, and Farquhar.
Kjellén, L. *See* Woods, Höök, Kjellén, Smith, and Rees.
Klagsbrun, M. Bovine colostrum supports the serum-free proliferation of epithelial cells but not of fibroblasts in long-term culture. 84:808.
— *See* D'Amore and Klagsbrun.
— *See* Davidson, Klagsbrun, Hill, Buckley, Sullivan, Brewer, and Woodward.
— *See* Feig, Klagsbrun, and Bellvé.
— *See* Rogelj, Klagsbrun, Atzmon, Kurokawa, Haimovitz, Fuks, and Vlodavsky.
— *See* Steimer and Klagsbrun.
Klarsfeld, A. *See* Fontaine, Klarsfeld, and Changeux.
Klatte, D. H., Kurpakus, M. A., Grelling, K. A., and Jones, J. C. R. Immunochemical characterization of three components of the hemidesmosome and their expression in cultured epithelial cells. 109:3377.
Klauck, T. *See* Jaken, Leach, and Klauck.
Klausner, R. D., van Renswoude, J., Kempf, C., Rao, K., Bateman, J. L., and Robbins, A. R. Failure to release iron from transferrin in a Chinese hamster ovary cell mutant pleiotropically defective in endocytosis. 98:1098.
— *See* Bonifacino, Perez, Klausner, and Sandoval.
— *See* Bonifacino, Suzuki, Lippincott-Schwartz, Weissman, and Klausner.
— *See* Chen, Bonifacino, Yuan, and Klausner.
— *See* Harford, Wolkoff, Ashwell, and Klausner.
— *See* Karnovsky, Kleinfeld, Hoover, and Klausner.
— *See* Weissman, Klausner, Rao, and Harford.
— *See* Wolkoff, Klausner, Ashwell, and Harford.
Klebe, R. J. *See* Kleinman, Klebe, and Martin.
Klee, C. B. *See* Momayezi, Lumpert, Kersken, Gras, Plattner, Krinks, and Klee.
— *See* Tash, Krinks, Patel, Means, Klee, and Means.
Klein, C., Lubs-Haukeness, J., and Simons, S. cAMP induces a rapid and reversible modification of the chemotactic receptor in *Dictyostelium discoideum*. 100:715.
Klein, C. E. *See* Kaufmann, Frösch, Westphal, Weber, and Klein.
Klein, D. L., Brown, D. M., Oegema, T. R., Brenchley, P. E., Anderson, J. C., Dickinson, M. A. J., Horigan, E. A., and Hassell, J. R. Glomerular basement membrane proteoglycans are derived from a large precursor. 106:963.
Klein, E. C. *See* Herman, Brant, Warty, Bonaccorso, Klein, Kormos, and Borovetz.
Klein, R. R., Mason, H. S., and Mullet, J. E. Light-regulated translation of chloroplast proteins. I. Transcripts of PsaA–PsaB, PsbA, and RbcL are associated with ploysomes in dark-grown and illuminated barley seedlings. 106:289.
Klein, W. L. *See* Tsui, Schubert, and Klein.
Kleinfeld, A. M. *See* Karnovsky, Kleinfeld, Hoover, and Klausner.
Kleinman, H. K., Klebe, R. J., and Martin, G. R. Role of collagenous matrices in the adhesion and growth of cells. 88:473.
— *See* Baron-Van Evercooren, Kleinman, Seppä, Rentier, and Dubois-Dalcq.
— *See* Grant, Leblond, Kleinman, Inoué, and Hassell.
— *See* Hadley, Byers, Suárez-Quian, Kleinman, and Dym.
— *See* Kubota, Kleinman, Martin, and Lawley.
Kleinschmidt, J. A., Scheer, U., Dabauvalle, M.-C., Bustin, M., and Franke, W. W. High mobility group proteins of amphibian oocytes: a large storage pool of a soluble high mobility group-1-like protein and involvement in transcriptional events. 97:838.
— *See* Ankenbauer, Kleinschmidt, Vandekerckhove, and Franke.
— *See* Franke, Kleinschmidt, Spring, Krohne, Grund, Trendelenburg, Stoehr, and Scheer.
— *See* Krohne, Stick, Kleinschmidt, Moll, Franke, and Hausen.
Klempner, M. S., Mikkelsen, R. B., Corfman, D. H., and Andre-Schwartz, J. Neutrophil plasma membranes. I. High-yield purification of human neutrophil plasma membrane vesicles by nitrogen cavitation and differential centrifugation. 86:21.
Kleve, M. G., and Clark, W. H., Jr. Association of actin with sperm centrioles: isolation of centriolar complexes and immunofluorescent localization of actin. 86:87.
Klier, F. G. *See* Anderson, Klier, and Tanguay.
— *See* Cheresh and Klier.
— *See* Cheresh, Pytela, Pierschbacher, Klier, Ruoslahti, and Reisfeld.
— *See* Schubert, LaCorbiere, Klier, and Birdwell.
Klier, G. *See* Engvall, Hessle, and Klier.
Kline, D., Robinson, K. R, and Nuccitelli, R. Ion currents and membrane domains in the cleaving *Xenopus* egg. 97:1753.
Klionsky, D. J. *See* Banta, Robinson, Klionsky, and Emr.
Kloetzel, P.-M. *See* Glätzer and Kloetzel.
Klotz, C., Bordes, N., Laine, M.-C., Sandoz, D., and Bornens, M. Myosin at the apical pole of ciliated epithelial cells as revealed by a monoclonal antibody. 103:613.
Klotz, F. *See* Howard, Lyon, Uni, Saul, Aley, Klotz, Panton, Sherwood, Marsh, Aikawa, and Rock.
Klumperman, J. *See* Eilers, Klumperman, and Hauri.
Kluxen, B. *See* Mack, Kluxen, and Kruppa.
Klymkowsky, M. W., Heuser, J. E., and Stroud, R. M. Protease effects on the structure of acetylcholine receptor membranes from *Torpedo*

californica. 85:823.
—, **Miller, R. H., and Lane, E. B.** Morphology, behavior, and interaction of cultured epithelial cells after the antibody-induced disruption of keratin filament organization. 96:494.
—, **and Plummer, D. J.** Giant axonal neuropathy: a conditional mutation affecting cytoskeletal organization. 100:245.
— *See* Marazzi, Bard, Klymkowsky, and Rubin.
Kmiec, E. B., and Worcel, A. The positive transcription factor of the 5S RNA gene proteolyses during direct exchange between 5S DNA sites. 103:673.
Knaack, D., Shen, I., Salpeter, M. M., and Podleski, T. R. Selective effects of ascorbic acid on acetylcholine receptor number and distribution. 102:795.
— *See* Horovitz, Knaack, Podleski, and Salpeter.
Knafelc, M. E. *See* Kane, Stanton, Raymond, Dobson, Knafelc, and Farber.
Knapp, A. C., Franke, W. W., Heid, H., Hatzfeld, M., Jorcano, J. L., and Moll, R. Cytokeratin No. 9, an epidermal type I keratin characteristic of a special program of keratinocyte differentiation displaying body site specificity. 103:657.
Knapp, B. *See* Rentrop, Knapp, Winter, and Schweizer.
Knapp, L. W., O'Guin, W. M., and Sawyer, R. H. Rearrangement of the keratin cytoskeleton after combined treatment with microtubule and microfilament inhibitors. 97:1788.
Knight, D. M. *See* Chapman, Knight, and Ringold.
Knodel, S. *See* Meda, Bruzzone, Knodel, and Orci.
Knoll, G., Burger, K. N. J., Bron, R., van Meer, G., and Verkleij, A. J. Fusion of liposomes with the plasma membrane of epithelial cells: fate of incorporated lipids as followed by freeze fracture and autoradiography of plastic sections. 107:2511.
Knox, J. P. *See* Pennell, Knox, Scofield, Selvendran, and Roberts.
Knox, P., Crooks, S., and Rimmer, C. S. Role of fibronectin in the migration of fibroblasts into plasma clots. 102:2318.
Knudsen, K. A. The calcium-dependent myoblast adhesion that precedes cell fusion is mediated by glycoproteins. 101:891.
—, **Smith, L., and McElwee, S.** Involvement of cell surface phosphatidylinositol-anchored glycoproteins in cell-cell adhesion of chick embryo fibroblasts. 109:1779.
— *See* Damsky, Knudsen, Bradley, Buck, and Horwitz.
— *See* Damsky, Knudsen, Dorio, and Buck.
Knudson, C. B., and Toole, B. P. Fluorescent morphological probe for hyaluronate. 100:1753.
Ko, C. *See* Goldstein and Ko.
Ko, C.-P. Regeneration of the active zone at the frog neuromuscular junction. 98:1685.
Kobayashi, S. *See* Drubin, Kobayashi, Kellogg, and Kirschner.
— *See* Karsenti, Kobayashi, Mitchison, and Kirschner.
Kobayashi, T., Tsukita, S., Tsukita, S., Yamamoto, Y., and Matsumoto, G. Subaxolemmal cytoskeleton in squid giant axon. I. Biochemical analysis of microtubules, microfilaments, and their associated high-molecular-weight proteins. 102:1699.
— *See* Mabuchi, Hamaguchi, Kobayashi, Hosoya, Tsukita, and Tsukita.
— *See* Martinuzzi, Askanas, Kobayashi, Engel, and Di Mauro.
— *See* Sato, Nishizawa, Nakayama, and Kobayashi.
— *See* Tsukita, Tsukita, Kobayashi, and Matsumoto.
Koch, E. A. *See* Downing, Spitzer, Koch, and Salo.
— *See* Spitzer, Downing, Koch, Salo, and Saidel.
Kocher, O. *See* Clowes, Clowes, Kocher, Ropraz, Chaponnier, and Gabbiani.
Kodama, H. *See* Sudo, Kodama, Amagai, Yamamoto, and Kasai.
Kodama, R. *See* Owaribe, Kodama, and Eguchi.
Koeffler, H. P. *See* Mangelsdorf, Koeffler, Donaldson, Pike, and Haussler.
Koehler, J. K., Nudelman, E. D., and Hakomori, S. A collagen-binding protein on the surface of ejaculated rabbit spermatozoa. 86:529.
Koelle, G. B. *See* Davis and Koelle.
Koenig, C. S., Dabiké, M., and Bronfman, M. Quantitative subcellular study of apical pole membranes from chicken oxyntic cells in resting and HCl secretory state. 105:2945.
Koenig, J. H., Saito, K., and Ikeda, K. Reversible control of synaptic transmission in a single gene mutant of *Drosophila melanogaster*. 96:1517.
Koh, K. *See* Yancey, Koh, Chung, and Revel.
Kohen, C. *See* Meda, Kohen, Kohen, Rabinovitch, and Orci.
Kohen, E. *See* Meda, Kohen, Kohen, Rabinovitch, and Orci.
Köhler, G. *See* Hendershot, Bole, Köhler, and Kearney.
Köhler, K. *See* Schmid, Köhler, and Setyono.
Kohno, T., and Shimmen, T. Accelerated sliding of pollen tube organelles along *Characeae* actin bundles regulated by Ca^{2+}. 106:1539.
Kohorn, B. D., Harel, E., Chitnis, P. R., Thornber, J. P., and Tobin, E. M. Functional and mutational analysis of the light-harvesting chlorophyll *a/b* protein of thylakoid membranes. 102:972.
— *See* Chitnis, Harel, Kohorn, Tobin, and Thornber.
Kohtz, D. S., Discher, N. R., Inagami, T., and Goldman, B. Growth and partial differentiation of presumptive human cardiac myoblasts in culture. 108:1067.
—, **Georgieva-Hanson, V., Kohtz, J. D., Schook, W. J., and Puszkin, S.** Mapping two functional domains of clathrin light chains with monoclonal antibodies. 104:897.
Kohtz, J. D. *See* Kohtz, Georgieva-Hanson, Kohtz, Schook, and Puszkin.
Koike, T. *See* Kato, Iwamoto, Koike, and Suzuki.
Koike, Y. *See* Kato, Koike, Suzuki, and Kimata.
Kolansky, D. *See* Horwich, Fenton, Firgaira, Fox, Kolansky, Mellman, and Rosenberg.
Kolega, J. Effects of mechanical tension on protrusive activity and microfilament and intermediate filament organization in an epidermal epithelium moving in culture. 102:1400.
Koliakos, G. G. *See* Charonis, Skubitz, Koliakos, Reger, Dege, Vogel, Wohlhueter, and Furcht.
Kolk, A. *See* Homan, Musgrave, de Nobel, Wagter, de Wit, Kolk, and van den Ende.
Komesli, S., Tournier, F., Paintrand, M., Margolis, R. L., Job, D., and Bornens, M. Mass isolation of calf thymus centrosomes: identification of a specific configuration. 109:2869.
Komoriya, A. *See* Friesel, Komoriya, and Maciag.
— *See* Humphries, Akiyama, Komoriya, Olden, and Yamada.
— *See* Owens, Geisterfer, Yang, and Komoriya.
Kondaiah, P. *See* Gehron Robey, Young, Flanders, Roche, Kondaiah, Reddi, Termine, Sporn, and Roberts.
Kondo, K., Watanabe, T., Sasaki, H., Uehara, Y., and Oishi, M. Induction of in vitro differentiation of mouse embryonal carcinoma (F9) and erythroleukemia (MEL) cells by herbimycin A, an inhibitor of protein phosphorylation. 109:285.
Kondor-Koch, C., Burke, B., and Garoff, H. Expression of Semliki Forest virus proteins from cloned complementary DNA. I. The fusion activity of the spike glycoprotein. 97:644.
— *See* Garoff, Kondor-Koch, Pettersson, and Burke.
— *See* Gerace, Ottaviano, and Kondor-Koch.
— *See* Urban, Parczyk, Leutz, Kayne, and Kondor-Koch.
Kondorosi, A. *See* Putnoky, Grosskopf, Cam Ha, Kiss, and Kondorosi,
— *See* Wong, Pankhurst, Kondorosi, and Broughton.
Kong, N. *See* Lodish and Kong.
— *See* Lodish, Kong, Hirani, and Rasmussen.
Konieczny, S. F., Lawrence, J. B., and Coleman, J. R. Analysis of muscle protein expression in polyethylene glycol-induced chicken: rat myoblast heterokaryons. 97:1348.
Konkel, M. E. *See* McKenna, Wang, and Konkel.
Konoha, G. *See* Hirano, Konoha, Toda, and Yanagida.
Kooijman, R., de Wildt, P., Beumer, S., van der Vliet, G., Homan, W., Kalshoven, H., Musgrave, A., and van den Ende, H. Wheat germ agglutinin induces mating reactions in *Chlamydomonas eugametos* by cross-linking agglutinin-associated glycoproteins in the flagellar membrane. 109:1677.
Koonce, M. P., Cloney, R. A., and Berns, M. W. Laser irradiation of centrosomes in newt eosinophils: evidence of centriole role in motility. 98:1999.
—, **and Schliwa, M.** Bidirectional organelle transport can occur in cell processes that contain single microtubules. 100:322.
—, **and Schliwa, M.** Reactivation of organelle movements along the cytoskeletal framework of a giant freshwater ameba. 103:605.
Koons, S. J. *See* Eckert, Koons, Schantz, and Zobel.
Kopan, R., and Fuchs, E. Use of retinoic acid to probe the relation between hyperproliferation-associated keratins and cell proliferation in normal and malignant epidermal cells. 109:295.
—, **Traska, G., and Fuchs, E.** Retinoids as important regulators of terminal differentiation: examining keratin expression in individual epidermal cells at various stages of keratinization. 105:427.
— *See* Coulombe, Kopan, and Fuchs.
— *See* Stoler, Kopan, Duvic, and Fuchs.
Kopf, G. S., Moy, G. W., and Vacquier, V. D. Isolation and characterization of sea urchin egg cortical granules. 95:924.
Köpfer-Hobelsberger, B. *See* Vandewalle, Köpfer-Hobelsberger, and Heidrich.
Koppel, D. E., Oliver, J. M., and Berlin, R. D. Surface functions during mitosis. III. Quantitative analysis of ligand-receptor movement into the cleavage furrow: diffusion vs. flow. 93:950.
— *See* Cowan, Myles, and Koppel.
— *See* Myles, Primakoff, and Koppel.
— *See* Noda, Yoon, Rodan, and Koppel.
Kopun, M. *See* Granzow, Kopun, and Zimmermann.

Korczack, L. D. *See* Goldstein and Korczack.
Kordeli, E., Cartaud, J., Nghiêm, H.-O., Devillers-Thiéry, A., and Changeux, J.-P. Asynchronous assembly of the acetylcholine receptor and of the 43-kD v_1 protein in the postsynaptic membrane of developing *Torpedo marmorata* electrocyte. 108:127.
—, Cartaud, J., Nghiêm, H.-O., Pradel, L.-A., Dubreuil, C., Paulin, D., and Changeux, J.-P. Evidence for a polarity in the distribution of proteins from the cytoskeleton in *Torpedo marmorata* electrocytes. 102:748.
Korenbrot, J. I. *See* Roof, Korenbrot, and Heuser.
Korkolainen, M. *See* Rauvala, Merenmies, Pihlaskari, Korkolainen, Huhtala, and Panula.
Korman, G. *See* Caulfield, Korman, Butterworth, Hogan, and David.
— *See* Samuelson, Korman, and Samuelson.
Kormos, R. L. *See* Herman, Brant, Warty, Bonaccorso, Klein, Kormos, and Borovetz.
Korn, E. D. *See* Hammer, Bowers, Paterson, and Korn.
— *See* Miyata, Bowers, and Korn.
— *See* Ueno and Korn.
Korn, H. *See* Triller, Cluzeaud, and Korn.
— *See* Triller, Cluzeaud, Pfeiffer, Betz, and Korn.
Kornberg, R. D. *See* Baer and Kornberg.
Kornberg, T. B. *See* Forbes, Kornberg, and Kirschner.
Kornfeld, S. *See* Duncan and Kornfeld
— *See* Elhammer and Kornfeld.
— *See* Faust, Chirgwin, and Kornfeld.
— *See* Faust, Wall, Perara, Lingappa, and Kornfeld.
— *See* Gabel, Goldberg, and Kornfeld.
— *See* Gabel and Kornfeld.
— *See* Goldberg, Gabel, and Kornfeld.
— *See* Messner, Griffiths, and Kornfeld.
Korsching, S. *See* Barth, Korsching, and Thoenen.
— *See* Heumann, Korsching, Bandtlow, and Thoenen.
Kosaka, T., and Ikeda, K. Reversible blockage of membrane retrieval and endocytosis in the garland cell of the temperature-sensitive mutant of *Drosophila melanogaster*, shibire^{TS1}. 97:499.
Koseki, M. *See* Matsuda, Saito, Yamaguchi, Koseki, and Hayashi.
Kosfiszer, M. G. *See* Snell, Kosfiszer, Clausell, Perillo, Imam, and Hunnicutt.
Kosher, R. A., Kulyk, W. M., and Gay, S. W. Collagen gene expression during limb cartilage differentiation. 102:1151.
Koshland, D. *See* Palmer, Koval, and Koshland.
Koslosky, R. *See* Penningroth, Cheung, Olehnik, and Koslosky.
Koss, L. G. *See* Dembitzer, Herz, Schermer, Wolley, and Koss.
Kotani, S. *See* Murofushi, Kotani, Aizawa, Hisanaga, Hirokawa, and Sakai.
Koteliansky, V. E. *See* Belkin, Ornatsky, Glukhova, and Koteliansky.
— *See* Glukhova, Frid, Shekhonin, Vasilevskaya, Grunwald, Saginati, and Koteliansky.
Kotwal, G. J. *See* Bergeron, Kotwal, Levine, Bilan, Rachubinski, Hamilton, Shore, and Ghosh.
Koury, M. J. *See* Koury, Koury, and Bondurant.
Koury, S. T., Koury, M. J., and Bondurant, M. C. Cytoskeletal distribution and function during the maturation and enucleation of mammalian erythroblasts. 109:3005.
— *See* Black, Koury, Bankert, and Repasky.
Koval, M., and Pagano, R. E. Lipid recycling between the plasma membrane and intracellular compartments: transport and metabolism of fluorescent sphingomyelin analogues in cultured fibroblasts. 108:2169.
— *See* Palmer, Koval, and Koshland.
Kowalski, C. G. *See* Vance, Kowalski, and Brinckerhoff.
Kowalski, J. *See* Schreiber, Kenney, Kowalski, Thomas, Gimenez-Gallego, Rios-Candelore, Di Salvo, Barritault, Courty, Courtois, Moenner, Loret, Burgess, Mehlman, Friesel, Johnson, and Maciag.
Kozak, M. A profusion of controls. 107:1.
— The scanning model for translation: an update. 108:229.
Kozak, S. E. *See* Nash, Kozak, Angerer, Angerer, Schatten, Schatten, and Marzluff.
Kozarsky, K. F., Brush, H. A., and Krieger, M. Unusual forms of low density lipoprotein receptors in hamster cell mutants with defects in the receptor structural gene. 102:1567.
— *See* Kingsley, Kozarsky, Segal, and Krieger.
Kraehenbuhl, J. P. *See* Verrey, Schaerer, Zoerkler, Paccolat, Geering, Kraehenbuhl, and Rossier.
— *See* Weltzin, Lucia-Jandris, Michetti, Fields, Kraehenbuhl, and Neutra.
Kraehenbuhl, J.-P. *See* Geering, Kraehenbuhl, and Rossier.
— *See* Haeuptle, Suard, Bogenmann, Reggio, Racine, and Kraehenbuhl.
— *See* Suard, Haeuptle, Farinon, and Kraehenbuhl.
Krag, S. S. *See* Criscuolo and Krag.
— *See* Robbins, Oliver, Bateman, Krag, Galloway, and Mellman.
Krahenbuhl, J. L. *See* Sibley, Krahenbuhl, Adams, and Weidner.
Kramer, R. *See* Parry, Cullen, Kaetzel, Kramer, and Moss.
Kramer, R. H., Bensch, K. G., Davison, P. M., and Karasek, M. A. Basil lamina formation by cultured microvascular endothelial cells. 99:692.
Krane, S. M. *See* Dayer, Vassalli, Bobbitt, Hull, Reich, and Krane.
— *See* Polla, Bonventre, and Krane.
Kranias, E. G. *See* Ferguson, Young, Raeymackers, and Kranias.
Kranz, T. *See* Fussle, Bhakdi, Sziegoleit, Tranum-Jensen, Kranz, and Wellensiek.
Krasnoff, M. *See* Schonbrunn, Krasnoff, Westendorf, and Tashjian.
Kraus, J. P. *See* Sztul, Hendrick, Kraus, Wall, Kalousek, and Rosenberg.
Krautner, K., Leinwand, L., D'Eustachio, P., Ruddle, F., and Darnell, J. E. Jr. Structural genes of the mouse major urinary protein are on chromosome 4. 94:414.
Kravit, N. G., Regula, C. S., and Berlin, R. D. A reevaluation of the structure of purified tubulin in solution: evidence for the prevalence of oligomers over dimers at room temperature. 99:188.
Krawczyk, Z., Mali, P., and Parvinen, M. Expression of a testis-specific hsp70 gene-related RNA in defined stages of rat seminiferous epithelium. 107:1317.
Krawisz, B. R., and Scott, R. E. Coupling of proadipocyte growth arrest and differentiation. I. Induction by heparinized medium containing human plasma. 94:394.
— *See* Scott, Hoerl, Wille, Florine, Krawisz, and Yun.
Kreel, B. J. *See* Zigmond, Levitsky, and Kreel.
Kreibich, G., Ojakian, G., Rodriguez-Boulan, E., and Sabatini, D. D. Recovery of ribophorins and ribosomes in "inverted rough" vesicles derived from rat liver rough microsomes. 93:111.
— *See* Amar-Costesec, Todd, and Kreibich.
— *See* Colman, Kreibich, Frey, and Sabatini.
— *See* Croze, Ivanov, Kreibich, Adesnik, Sabatini, and Rosenfeld.
— *See* De Lemos-Chiarandini, Frey, Sabatini, and Kreibich.
— *See* Finidori, Rizzolo, Gonzalez, Kreibich, Adesnik, and Sabatini.
— *See* Harnik-Ort, Prakash, Marcantonio, Colman, Rosenfeld, Adesnik, Sabatini, and Kreibich.
— *See* Marcantonio, Amar-Costesec, and Kreibich.
— *See* Monier, Van Luc, Kreibich, Sabatini, and Adesnik.
— *See* Rosenfeld, Kreibich, Popov, Kato, and Sabatini.
— *See* Rosenfeld, Marcantonio, Hakimi, Ort, Atkinson, Sabatini, and Kreibich.
— *See* Sabatini, Kreibich, Morimoto, and Adesnik.
Kreider, B. L. *See* Migliaccio, Migliaccio, Kreider, Rovera, and Adamson.
Kreig, U. C., Johnson, A. E., and Walter, P. Protein translocation across the endoplasmic reticulum membrane: identification photocross-linking of a 39-kD integral membrane glycoprotein as part of aputative translocation tunnel. 109:2033.
Kreiner, T., Sossin, W., and Scheller, R. H. Localization of *Aplysia* neurosecretory peptides to multiple populations of dense core vesicles. 102:769.
Kreis, T. E. *See* Allen and Kreis.
— *See* Bré, Kreis, and Karsenti.
— *See* Matteoni and Kreis.
— *See* Scherson, Kreis, Schlessinger, Littauer, Borisy, and Geiger.
Kreman, M. *See* Zampighi, Kreman, Ramón, Moreno, and Simon.
Krepler, R. *See* Moll, Franke, Volc-Platzer, and Krepler.
— *See* Wiche, Krepler, Artlieb, Pytela, and Denk.
Kresse, H. *See* Schmidt, Robenek, Harrach, Glössl, Nolte, Hörmann, Richter, and Kresse.
Kretschmer, A. *See* Barnett, Kretschmer, Austen, Goebel, Hart, Elting, and Kamarck.
Krichevsky, A. *See* Corless, Matzuk, Ramabhadran, Krichevsky, and Boime.
Krieg, T. *See* Mauch, van der Mark, Helle, Mollenhauer, Pfaffle, and Krieg.
Krieger, M. *See* Kingsley, Kozarsky, Segal, and Krieger.
— *See* Kozarsky, Brush, and Krieger.
Krimpenfort, P. J. *See* Pieper, Schaart, Krimpenfort, Henderik, Moshage, van de Kemp, Ramaekers, Berns, and Bloemendal.
Krinks, M. *See* Tash, Krinks, Patel, Means, Klee, and Means.
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Krisans, S. *See* Keller, Pazirandeh, and Krisans.
Krisans, S. K. *See* Keller, Scallen, Clarke, Maher, Krisans, and Singer.
Krishan, A. *See* Quillen, Castello, Krishan, and Rubin.
Krissansen, G. W. *See* Burns, Lucas, Krissansen, Werkmeister, Scanlon, Simpson, and Vadas.
Kristensen, P., Nielsen, L. S., Grøndahl-Hansen, J., Andresen, P. B., Larsson, L.-I., and Danø, K. Immunocytochemical demonstration of tissue-type plasminogen activator in endocrine cells of the rat pituitary gland. 101:305.

— *See* Larsson, Skriver, Nielsen, Hansen, Kristensen, and Danø.
— *See* Skriver, Larsson, Kielberg, Nielsen, Andresen, Kristensen, and Danø.
Kristo, P. *See* Catterall, Stein, Kristo, Means, and O'Malley.
Kristofferson, D., Mitchison, T., and Kirschner, M. Direct observation of steady-state microtubule dynamics. 102:1007.
Krizsa, F. *See* Spooncer, Gallagher, Krizsa, and Dexter.
Krochmalnic, G. *See* Capco, Krochmalnic, and Penman.
— *See* Fey, Krochmalnic, and Penman.
Krogstad, D. J., Schlesinger, P. H., and Glauzman, I. Y. Antimalarials increase vesicle pH in *Plasmodium falciparum*. 101:2302.
Krohne, G., Stick, R., Kleinschmidt, J. A, Moll, R., Franke, W. W., and Hausen, P. Immunological localization of a major karyoskeletal protein in nucleoli of oocytes and somatic cells of *Xenopus laevis*. 94:749.
—, **Waizenegger, I., and Höger, T. H.** The conserved carboxy-terminal cysteine of nuclear lamins is essential for lamin association with the nuclear envelope. 109:2003.
— *See* Benavente and Krohne.
— *See* Franke, Kleinschmidt, Spring, Krohne, Grund, Trendelenburg, Stoehr, and Scheer.
— *See* Longo, Krohne, and Franke.
Kronenberg, H. M., Fennick, B. J., and Vasicek, T. J. Transport and cleavage of bacterial pre-β-lactamase by mammalian microsomes. 96:1117.
Kronquist, K. E. *See* Kedersha, Hill, Kronquist, and Rome.
Kropf, D. L. Electrophysiological properties of *Achlya* hyphae: ionic currents studied by intracellular potential recording. 102:1209.
—, **Caldwell, J. H., Gow, N. A. R., and Harold, F. M.** Transcellular ion currents in the water mold *Achlya*: amino acid/proton symport as a mechanism of current entry. 99:486.
Krotski, D. M., Domingo, C., and Bronner-Fraser, M. Distribution of a putative cell surface receptor for fibronectin and laminin in the avian embryo. 103:1061.
Krueger, C. M. *See* Neufeld, Majerus, Krueger, and Saffitz.
Krueger, J. G. *See* Wang, Yin, Krueger, Caliguiri, and Tamm.
Kruijer, W. *See* Defize, Boonstra, Meisenhelder, Kruijer, Tertoolen, Tilly, Hunter, van Bergen en Henegouwen, Moolenaar, and de Laat.
Kruithof, E. K. O. *See* Genton, Kruithof, and Schleuning.
Krumweide, M. *See* Sauk, Krumweide, Cocking-Johnson, and White.
Kruppa, J. *See* Mack, Kluxen, and Kruppa.
Kruse, J. *See* ffrench-Constant, Miller, Kruse, Schachner, and Raff.
Kruskal, B. A., Keith, C. H., and Maxfield, F. R. Thyrotropin-releasing hormone–induced changes in intracellular Ca^{2+} measured by microspectrofluorometry on individual quin2-loaded cells. 99:1167.
—, **and Maxfield, F. R.** Cytosolic-free calcium increases before and oscillates during frustrated phagocytosis in macrophages. 105:2685.
Krystosek, A., and Seeds, N. W. Peripheral neurons and Schwann cells secrete plasminogen activator. 98:773.
Kubai, D. F. Meiosis in *Sciara coprophila*: structure of the spindle and chromosome behavior during the first meiotic division. 93:655.
— Nonrandom chromosome arrangements in germ line nuclei of *Sciara coprophila* males: the basis for nonrandom chromosome segregation on the meiosis I spindle. 105:2433.
—, **and Wise, D.** Nonrandom chromosome segregation in *Neocurtilla (Gryllotalpa) hexadactyla*: An ultrastructural study. 88:281.
— *See* Nicklas, Kubai, and Hays.
Kubalek, E., Ralston, S., Lindstrom, J., and Unwin, N. Location of subunits within the acetylcholine receptor by electron image analysis of tubular crystals from *Torpedo marmorata*. 105:9.
— *See* Unwin, Toyoshima, and Kubalek.
Kubisz, P. *See* Moreau, Angelier, Bonnanfant-Jais, Gounon, and Kubisz.
Kubota, Y., Kleinman, H. K., Martin, G. R., and Lawley, T. J. Role of laminin and basement membrane in the morphological differentiation of human endothelial cells into capillary-like structures. 107:1589.
Kuby, J. M., and Wofsy, L. Intramembrane particles and the organizatio. of lymphocyte membrane proteins. 88:591.
Kücherer, A., Faissner, A., and Schachner, M. The novel carbohydrate epitope L3 is shared by some neural cell adhesion molecules. 104:1597.
Kucherlapati, R. *See* Hsiung and Kucherlapati.
— *See* Warrick, Hsiung, Shows, and Kucherlapati.
Kuchka, M. R., and Jarvik, J. W. Analysis of flagellar size control using a mutant of *Chlamydomonas reinhardtii* with a variable number of flagella. 92:170.
Kuczmarski, E. R., Tafuri, S. R., and Parysek, L. M. Effect of heavy chain phosphorylation on the polymerization and structure of *Dictyostelium* myosin filaments. 105:2989.
— *See* Peltz, Kuczmarski, and Spudich.
Kuehl, L., Salmond, B., and Tran, L. Concentrations of high-mobility-group proteins in the nucleus and cytoplasm of several rat tissues. 99:648.
— *See* Wu, Kuehl, and Rechsteiner.
— *See* Wu, Rechsteiner, and Kuehl.
Kuettel, M. R., Squinto, S. P., Kwast-Welfeld, J., Schwoch, G., Schweppe, J. S., and Jungmann, R. A. Localization of nuclear subunits of cyclic AMP–dependent protein kinase by the immunocolloidal gold method. 101:965.
Kuettner, K. E., Memoli, V. A., Pauli, B. U., Wrobel, N. C., Thonar, E. J.-M. A., and Daniel, J. C. Synthesis of cartilage matrix by mammalian chondrocytes in vitro. II. Maintenance of collagen and proteoglycan phenotype. 93:751.
—, **Pauli, B. U., Gall, G., Memoli, V. A., and Schenk, R. K.** Synthesis of cartilage matrix by mammalian chondrocytes in vitro. I. Isolation, culture characteristics, and morphology. 93:743.
— *See* Daniel, Pauli, and Kuettner.
— *See* Rifas, Uitto, Memoli, Kuettner, Henry, and Peck.
Kühlbrandt, W., Thaler, T., and Wehrli, E. The structure of membrane crystals of the light-harvesting chlorophyll *a/b* protein complex. 96:1414.
Kuhn, C. *See* Villiger, Kelley, Engleman, Kuhn, and McDonald.
Kühn, K. *See* Mayne, Wiedemann, Irwin, Sanderson, Fitch, Linsenmayer, and Kühn.
Kuismanen, E. *See* Alitalo, Kuismanen, Myllylä, Kiistala, Asko-Seljavaara, and Vaheri.
Kulyk, W. M. *See* Kosher, Kulyk, and Gay.
Kumar, N. M., and Gilula, N. B. Cloning and characterization of human and rat liver cDNAs coding for a gap junction protein. 103:767.
— *See* Gimlich, Kumar, and Gilula.
Kumar, R. V., Wolfman, A., Panniers, R., and Henshaw, E. C. Mechanism of inhibition of polypeptide chain initiation in calcium-depleted Ehrlich ascites tumor cells. 108:2107.
Kundahl, E. R. *See* LaFond, Woodcock, Woodcock, Kundahl, and Lucas.
Künemund, V., Jungalwala, F. B., Fischer, G., Chou, D. K. H., Keilhauer, G., and Schachner, M. The L2/HNK-1 carbohydrate of neural cell adhesion molecules is involved in cell interactions. 106:213.
Kung, C. *See* Adoutte, Ramanathan, Lewis, Dute, Ling, Kung, and Nelson.
— *See* Haga, Forte, Saimi, and Kung.
— *See* Haga, Saimi, Takahashi, and Kung.
— *See* Omoto and Kung.
— *See* Ramanathan, Saimi, Peterson, Nelson, and Kung.
Küng, W. *See* Novak-Hofer, Küng, and Eppenberger.
Kunicki, T. J. *See* Newman, Kawai, Montgomery, and Kunicki.
— *See* Okita, Pidard, Newman, Montgomery, and Kunicki.
— *See* Piotrowicz. Orchekowski, Nugent, Yamada, and Kunicki.
— *See* Wayner, Carter, Piotrowicz, and Kunicki.
Kunkel, G. R. *See* Madore, Wieben, Kunkel, and Pederson.
Kunkel, L. M. *See* Hoffman, Watkins, Slayter, and Kunkel.
Kuo, M. T. Analysis of DNA attached to the chromosome scaffold. 93:278.
Kuo, T. *See* Teeter, Atsumi, Sen, and Kuo.
Kurdyla, J. T. *See* Black and Kurdyla.
Kurer, V. *See* Grove, Kurer, Lehner, Doetschman, Perriard, and Eppenberger.
Kurihara, T. *See* Sadler, Chiang, Kurihara, Rothblatt, Way, and Silver.
Kuriyama, R., and Borisy, G. G. Centriole cycle in Chinese hamster ovary cells as determined by whole-mount electron microscopy. 91:814.
—, **and Borisy, G. G.** Identification of molecular components of the centrosphere in the mitotic spindle of sea urchin eggs. 101:524.
—, **and Borisy, G. G.** Microtubule-nucleating activity of centrosomes in Chinese hamster ovary cells is independent of the centriole cycle but coupled to the mitotic cycle. 91:822.
— *See* Bergen, Kuriyama, and Borisy.
— *See* Sato, Kuriyama, and Nishizawa.
— *See* Sellitto and Kuriyama.
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— *See* Hogan, Taylor, Kurkinen, and Couchman.
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— *See* Tsukita, Ishikawa, and Kurokawa.
— *See* Tsukita, Tsukita, Ishikawa, Kurokawa, Morimoto, Sobue, and Kakiuchi.
Kurokawa, T. *See* Braunhut, Gudas, Kurokawa, Sasse, and D'Amore.
Kurpakus, M. A. *See* Klatte, Kurpakus, Grelling, and Jones.
Kurth, P. D., and Bustin, M. Localization of chromosomal protein HMG-1 in polytene chromosomes of *Chironomus thummi*. 89:70.
Kurzchalia, T. V. *See* Wiedmann, Kurzchalia, Bielka, and Rapoport.
Kusakabe, M., Yokoyama, M., Sakakura, T., Nomura, T., Hosick, H. L., and Nishizuka, Y. A novel methodology for analysis of cell distribution in chimeric mouse organs using a stain specific antibody. 107:257.
Kusch, M. *See* Cox, Kusch, and Edgar.

Kusel, J. R. *See* Foley, MacGregor, Kusel, Garland, Downie, and Moore.
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Kuusela, P. *See* Sariola, Kuusela, and Ekblom.
Kuwano, M. *See* Ono, Mifune, Yoshimura, Ohnishi, and Kuwano.
Kuypers, F. A., Roelofsen, B., Berendsen, W., Op den Kamp, J. A. F., and van Deenen, L. L. M. Shape changes in human erythrocytes induced by replacement of the native phosphatidylcholine with species containing various fatty acids. 99:2260.
— *See* Christiansson, Kuypers, Roelofsen, Op den Kamp, and van Deenen.
Kuznetsov, S. A., Rodionov, V. I., Nadezhdina, E. S., Murphy, D. B., and Gelfand, V. I. Identification of a 34-kD polypeptide as a light chain of microtubule-associated protein-1 (MAP-1) and its association with a MAP-1 peptide that binds to microtubules. 102:1060.
Kuzuya, H. *See* Lazarovici, Dickens, Kuzuya, and Guroff.
Kwan, A. P. L., Dickson, I. R., Freemont, A. J., and Grant, M. B. Comparative studies of type X collagen expression in normal and rachitic chicken epiphyseal cartilage. 109:1849.
Kwast-Welfeld, J. *See* Kuettel, Squinto, Kwast-Welfeld, Schwoch, Schweppe, and Jungmann.
Kwiatkowski, D. J., Janmey, P. A., and Yin, H. L. Identification of critical functional and regulatory domains in gelsolin. 108:1717.
—, **Mehl, R., and Yin, H. L.** Genomic organization and biosynthesis of secreted and cytoplasmic forms of gelsolin. 106:375.
— *See* Hartwig, Chambers, Hopcia, and Kwiatkowski.
Kyle, D. J. *See* Ohad, Kyle, and Arntzen.
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— *See* Schubert, LaCorbiere, and Esch.
— *See* Schubert, LaCorbiere, Klier, and Birdwell.
Lacy, B. E., and Underhill, C. B. The hyaluronate receptor is associated with actin filaments. 105:1395.
Laemmli, U. K. *See* Earnshaw and Laemmli.
— *See* Kistler, Duncombe, and Laemmli.
Laffler, T. G. *See* Carrino and Laffler.
LaFond, R. E., Woodcock, H., Woodcock, C. L. F., Kundahl, E. R., and Lucas, J. J. Generation of an internal matrix in mature avian erythrocyte nuclei during reactivation in cytoplasts. 96:1815.
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— *See* Strauch and LaFountain.
— *See* Strauch, Luna, and LaFountain.
LaFrance, S. *See* Vertel, Velasco, LaFrance, Walters, and Kaczman-Daniel.
Lagenaur, C. *See* Sommer, Lagenaur, and Schachner.
Lai, E. Y., Remillard, S. P., and Fulton, C. The α-tubulin gene family expressed during cell differentiation in *Naegleria gruberi* 106:2035.
— *See* Fulton, Cheng, and Lai.
Lai, M. Z. *See* Gudewicz, Molnar, Lai, Beezhold, Siefring, Credo, and Lorand.
Lai, W. H., Cameron, P. H., Doherty, J.-J. II, Posner, B. I., and Bergeron, J. J. M. Ligand-mediated autophosphorylation activity of the epidermal growth factor receptor during internalization. 109:2751.
—, **Cameron, P. H., Wada, I., Doherty, J.-J. II, Kay, D. G., Posner, B. I., and Bergeron, J. J. M.** Ligand-mediated internalization, recycling, and downregulation of the epidermal growth factor receptor in vivo. 109:2741.
Laiho, M., Saksela, O., Andreasen, P. A., and Keski-Oja, J. Enhanced production and extracellular deposition of the endothelial-type plasminogen activator inhibitor in cultured human lung fibroblasts by transforming growth factor-β. 103:2403.
Laine, M.-C. *See* Klotz, Bordes, Laine, Sandoz, and Bornens.
Lake, J. A. *See* Bernabeu, Tobin, Fowler, Zabin, and Lake.
Lakhotia, S. C. *See* Bendena, Garbe, Traverse, Lakhotia, and Pardue.
Laki, K. *See* Fesus, Falus, Erdei, and Laki.
Lal, R. *See* Yancey, John, Lal, Austin, and Revel.
Laliberte, A., and Gicquaud, C. Polymerization of actin by positively charged liposomes. 106:1221.
Laliberté, J.-F., Dagenais, A., Fillion, M., Bibor-Hardy, V., Simard, R., and Royal, A. Identification of distinct mRNAs for nuclear lamin C and a putative precursor of nuclear lamin A. 98:980.
Lallier, T. *See* Bronner-Fraser and Lallier.
Lalwani, N. D. *See* Reddy, Rao, Qureshi, Reddy, Scarpelli, and Lalwani.
Lam, D. M. K. *See* Gonzalez-Fernandez, Landers, Glazebrook, Fong, Liou, Lam, and Bridges.
Lam, H.-Y., P. *See* Heine, Munoz, Flanders, Ellingsworth, Lam, Thompson, Roberts, and Sporn.
Lamb, N. J. C., Fernandez. A., Conti, M. A., Adelstein, R., Glass, D. B., Welch, W. J., and Feramisco, J. R. Regulation of actin microfilament integrity in living nonmuscle cells by the cAMP-dependent protein kinase and the myosin light chain kinase. 106:1955.
—, **Fernandez, A., Feramisco, J. R., and Welch, W. J.** Modulation of vimentin containing intermediate filament distribution and phosphorylation in living fibroblasts by the cAMP-dependent protein kinase. 108:2409.
Lamb, R. A. *See* Hiebert and Lamb.
— *See* Hull, Gilmore, and Lamb.
— *See* Ng, Randall, and Lamb.
— *See* Parks, Hull, and Lamb.
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— *See* Vantard, Lambert, De Mey, Picquot, and Van Eldik.
Lambert, D. T. *See* Halaban, Pomerantz, Marshall, Lambert, and Lerner.
Lambert, H. *See* Landry, Chrétien, Lambert, Hickey, and Weber.
Lambotte, P., Falmagne, P., Capiau, C., Zamen, J., Ruysschaert, J.-M., and Dirkx, J. Primary structure of diphtheria toxin fragment B: Structural similarities with lipid-binding domains. 87:837.
Lambowitz, A. M. *See* LaPolla and Lambowitz.
Lamont, G. *See* Saul, Lamont, Sawyer, and Kidson.
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Lamoureux, P. *See* Dennerll, Lamoureux, Buxbaum, and Heidemann.
Lampe, P. D. *See* Johnson, Lampe, Hur, Louis, and Johnson.
Lamppa, G. K., and Abad, M. S. Processing of a wheat light-harvesting chlorophyll a/b protein precursor by a soluble enzyme from higher plant chloroplasts. 105:2641.
Lampron, C. *See* Lebel, Lampron, Royal, and Raymond.
Lampugnani, M. G. *See* Dejana, Lampugnani, Giorgi, Gaboli, Federici, Ruggeri, and Marchisio.
Lancashire, C. L. *See* Craig and Lancashire.
Lancillotti, F., Lopez, M. C., Alonso, C., and Stollar, B. D. Locations of Z-DNA in polytene chromosomes. 100:1759.
Land, H. *See* Ridley, Davis, Stroobant, and Land.
Landa, C. *See* Poltorak, Sadoul, Keilhauer, Landa, Fahrig, and Schachner.
Lander, A. D., Fujii, D. K., Gospodarowicz, D., and Reichardt, L. F. Characterization of a factor that promotes neurite outgrowth: evidence linking activity to a heparan sulfate proteoglycan. 94:574.
—, **Fujii, D. K., and Reichardt, L. F.** Purification of a factor that promotes neurite outgrowth: isolation of laminin and associated molecules. 101:898.
Landers, J. M. *See* Heidemann, Landers, and Hamborg.
Landers, R. A. *See* Gonzalez-Fernandez, Landers, Glazebrook, Fong, Liou, Lam, and Bridges.
Landesman, Y. *See* Gruenbaum, Landesman, Drees, Barc, Saumweber, Paddy, Sedat, Smith, Benton, and Fisher.
Landis, D. M. D., and Reese, T. S. Astrocyte membrane structure: Changes after circulatory arrest. 88:660.
—, **and Reese, T. S.** Cytoplasmic organization in cerebellar dendritic spines. 97:1169.
Landis, W. J., Sanzone, C. F., Brickley-Parsons, D., and Glimcher, M. J. Radioautographic visualization and biochemical identification of *O*-phosphoserine- and *O*-phosphothreonine-containing phosphoproteins in mineralizing embryonic chick bone. 98:986.
— *See* Gerstenfeld, Chipman, Kelly, Hodgens, Lee, and Landis.
Landreth, G. E., and Rieser, G. D. Nerve growth factor- and epidermal growth factor-stimulated phosphorylation of a PC12 cytoskeletally associated protein in situ. 100:677.
—, **Williams, L. K., and McCutchen, C.** Wheat germ agglutinin blocks the biological effects of nerve growth factor. 101:1690.
—, **Williams, L. K., and Rieser, G. D.** Association of the epidermal growth factor receptor kinase with the detergent-insoluble cytoskeleton of A431 cells. 101:1341.
— *See* Gunning, Landreth, Bothwell, and Shooter.
Landry, J., Bernier, D., Ouellet, C., Goyette, R., and Marceau, N. Spheroidal aggregate culture of rat liver cells: histotypic reorganization, biomatrix deposition, and maintenance of functional activities. 101:914.
—, **Chrétien, P., Lambert, H., Hickey, E., and Weber, L. A.** Heat shock resistance conferred by expression of the human HSP27 gene in rodent

cells. 109:7.
Landschulz, W., Thesleff, I., and Ekblom, P. A lipophilic iron chelator can replace transferrin as a stimulator of cell proliferation and differentiation. 98:596.
Lane, B. *See* Snyderman, Pike, Edge, and Lane.
Lane, C. *See* Colman, Morser, Lane, Besley, Wylie, and Valle.
Lane, E. B. Monoclonal antibodies provide specific molecular markers for the study of epithelial tonofilament organization. 92:665.
— *See* Klymkowsky, Miller, and Lane.
Lane, N. J., and Chandler, H. J. Definitive evidence for the existence of tight junctions in vertebrates. 86:765.
Lanford, R. E. *See* Dworetzky, Lanford, and Feldherr.
Lanfranchi, G. *See* Scheer, Lanfranchi, Rose, Franke, and Ringertz.
Lang, E., Mazauric-Stüker, M.-L., and Maelicke, A. States of developmental commitment of a mouse embryonal carcinoma cell line differentiating along a neural pathway. 109:2481.
Lang, I., Scholz, M., and Peters, R. Molecular mobility and nucleocytoplasmic flux in hepatoma cells. 102:1183.
Langanger, G., De May, J., Moeremans, M., Daneels, G., De Brabander, M., and Small, J. V. Ultrastructural localization of α-actinin and filamin in cultured cells with the immunogold staining (IGS) method. 99:1324.
—, **Moeremans, M., Daneels, G., Sobieszek, A., De Brabander, M., and De Mey, J.** The molecular organization of myosin in stress fibers of cultured cells. 102:200.
Langdon, R. *See* Halaban, Langdon, Birchall, Cuono, Baird, Scott, Moellmann, and McGuire.
Lange, G. *See* Mecham, Lange, Madaras, and Starcher.
Lange, Y., Hadesman, R. A., and Steck, T. L. Role of the reticulum in the stability and shape of the isolated human erythrocyte membrane. 92:714.
Langer-Safer, P. R. *See* Hutchison, Langer-Safer, Ward, and Hamkalo.
— *See* Manuelidis, Langer-Safer, and Ward.
Langevin, G. L. *See* Linck and Langevin.
— *See* Linck, Olson, and Langevin.
— *See* Singer, Langevin, and Lawrence.
Langford, G. *See* Cohen, Bartelt, Jaeger, Langford, and Nemhauser.
Langford, G. M. Arrangement of subunits in microtubules with 14 protofilaments. 87:521.
Langley, K. *See* Thuret-Carnahan, Bossu, Feltz, Langley, and Aunis.
Langley, O. K. *See* Bader, Trifaró, Langley, Thiersé, and Aunis.
Langmore, J. P., and Paulson, J. R. Low angle x-ray diffraction studies of chromatin structure in vivo and in isolated nuclei and metaphase chromosomes. 96:1120.
— *See* Paulson and Langmore.
Languino, L. R., Gehlsen, K. R., Wayner, E., Carter, W. G., Engvall, E., and Ruoslahti, E. Endothelial cells use $\alpha_2\beta_1$ integrin as a laminin receptor. 109:2455.
— *See* Dejana, Colella, Languino, Balconi, Corbascio, and Marchisio.
Lankford, K. L., and Letourneau, P. C. Evidence that calcium may control neurite outgrowth by regulating the stability of actin filaments. 109:1229.
Lanks, K. W., and Chin, N. W. Identification of cytoskeletal components involved in attachment of L929 cells and macrophages to polystyrene. 89:691.
—, **and Kasambalides, E. J.** Dexamethasone induces gelsolin synthesis and altered morphology in L929 cells. 96:577.
— *See* Chin and Lanks.
Lanni, F., Waggoner, A. S., and Taylor, D. L. Structural organization of interphase 3T3 fibroblasts studied by total internal reflection fluorescence microscopy. 100:1091.
— *See* Luby-Phelps, Lanni, and Taylor.
— *See* Luby-Phelps, Taylor, and Lanni.
— *See* McNeil, Murphy, Lanni, and Taylor.
Lansing Taylor, D. *See* DeBiasio, Wang, Fisher, and Lansing Taylor.
— *See* Pagliaro and Lansing Taylor.
Lanz, R. B. *See* Ruegg, Stoeckli, Lanz, Streit, and Sonderegger.
LaPolla, R. J., and Lambowitz, A. M. Mitochondrial ribosome assembly in *Neurospora*: structural analysis of mature and partially assembled ribosomal subunits by equilibrium centrifugation in CsCl gradients. 95:267.
Laporte, J. *See* Nagy, Laporte, Penverne, and Hervé.
Lara, S. *See* Garrigues, Lark, Lara, Hellström, Hellström, and Wight.
Larabell, C. A., and Chandler, D. E. The extracellular matrix *Xenopus laevis* eggs: a quick-freeze, deep-etch analysis of its modification at fertilization. 107:731.
Lark, M. W. *See* Garrigues, Lark, Lara, Hellström, Hellström, and Wight.
— *See* Singer, Kawka, Scott, Mumford, and Lark.
Larkin, J. M., Donzell, W. C., and Anderson, R. G. W. Potassium-dependent assembly of coated pits: new coated pits form as planar clathrin lattices. 103:2619.
Larkins, B. A. *See* Hurkman, Smith, Richter, and Larkins.
LaRochelle, W. J., Wray, B. E., Sealock, R., and Froehner, S. C. Immunochemical demonstration that amino acids 360-377 of the acetylcholine receptor gamma subunit are cytoplasmic. 100:684.
Larriba, G. *See* Via, Sramek, Larriba, and Steiner.
Larrick, J. W. *See* Enns, Larrick, Suomalainen, Schroder, and Sussman.
— *See* Torti, Torti, Larrick, and Ringold.
Larrivee, D. C. *See* Schinz, Lo, Larrivee, and Pak.
Larsen, P. M. *See* Bravo, Fey, Larsen, Coppard, and Celis.
— *See* Celis, Larsen, Fey, and Celis.
Larson, D. M., Fujiwara, K., Alexander, R. W., and Gimbrone, M. A., Jr. Myosin in cultured vascular smooth muscle cells: immunofluorescence and immunochemical studies of alterations in antigenic expression. 99:1518.
—, **and Sheridan, J. D.** Intercellular junctions and transfer of small molecules in primary vascular endothelial cultures. 92:183.
Larson, D. W., and Dingle, A. D. Isolation, ultrastructure, and protein composition of the flagellar rootlet of *Naegleria gruberi*. 89:424.
Larson, R. S., Corbi, A. L., Berman, L., and Springer, T. Primary structure of leukocyte function-associated molecule-1 α subunit: an integrin with an embedded domain defining a protein superfamily. 108:703.
Larsson, L.-I., Skriver, L., Nielsen, L. S., Hansen, J. G., Kristensen, P., and Danø, K. Distribution of urokinase-type plasminogen activator immunoreactivity in the mouse. 98:894.
— *See* Kristensen, Nielsen, Grøndahl-Hansen, Andresen, Larsson, and Danø.
— *See* Madsen, Larsson, Rehfeld, Schwartz, Lernmark, Labrecque, and Steiner.
— *See* Skriver, Larsson, Kielberg, Nielsen, Andresen, Kristensen, and Danø.
La Russo, N. F. *See* Novikoff, La Russo, Novikoff, Stockert, Yam, and Le Sage.
Lasek, R. J. *See* Black and Lasek.
— *See* Brady, Tytell, Heriot, and Lasek.
— *See* Brady, Tytell, and Lasek.
— *See* Fáth and Lasek.
— *See* Garner and Lasek.
— *See* Heriot, Gambetti, and Lasek.
— *See* Miller and Lasek.
— *See* Morris and Lasek.
Laskey, R. A. *See* Shechan, Mills, Sleeman, Laskey, and Blow.
Lasko, P. *See* Ayme-Southgate, Lasko, French, and Pardue.
Lasky, L. A. *See* Bowen, Nguyen, and Lasky.
Last, R. L., and Woolford, J. L., Jr. Identification and nuclear localization of yeast pre-messenger RNA processing components: *RNA2* and *RNA3* proteins. 103:2103.
Laterra, J., Silbert, J. E., and Culp, L. A. Cell surface heparan sulfate mediates some adhesive responses to glycosaminoglycan-binding matrices, including fibronectin. 96:112.
Lathrop, B., Olson, E., and Glaser, L. Control by fibroblast growth factor of differentiation in the BC_3H1 muscle cell line. 100:1540.
—, **Thomas, K., and Glaser, L.** Control of myogenic differentiation by fibroblast growth factor is mediated by position in the G_1 phase of the cell cycle. 101:2194.
Lattanzio, F. A., Jr. *See* Suchard, Lattanzio, Rubin, and Pressman.
Lauffenburger, D. A. *See* Daukas, Lauffenburger, and Zigmond.
— *See* Tranquillo, Lauffenburger, and Zigmond.
— *See* Zigmond, Sullivan, and Lauffenburger.
Lauffer, L. *See* Andrews, Lauffer, Walter, and Lingappa.
— *See* Tajima, Lauffer, Rath, and Walter.
Laug, W. E., Tokes, Z. A., Benedict, W. F., and Sorgente, N. Anchorage independent growth and plasminogen activator production by bovine endothelial cells. 84:281.
Laurie, G. W., Horikoshi, S., Killen, P. D., Segui-Real, B., and Yamada, Y. In situ hybridization reveals temporal and spatial changes in cellular expression mRNA for a laminin receptor, laminin, and basement membrane (type IV) collagen in the developing kidney. 109:1351.
—, **Leblond, C. P., and Martin, G. R.** Localization of type IV collagen, laminin, heparan sulfate proteoglycan, and fibronectin to the basal lamina of basement membranes. 95:340.
— *See* Inoué, Leblond, and Laurie.
Laurila, P., Virtanen, I., Lehto, V.-P., Vartio, T., and Stenman, S. Expression and distribution of vimentin and keratin filaments in heterokaryons of human fibroblasts and amnion epithelial cells. 94:308.
— *See* Virtanen, Ekblom, and Laurila.
Lauris, V. *See* Haring, White, Kahn, Kasuga, and Lauris.
LaVail, J. H., Sugino, I. K., and McDonald, D. M. Localization of axonally transported ^{125}I-wheat germ agglutinin beneath the plasma membrane of chick retinal ganglion cells. 96:373.

— *See* Margolis, Marchand, Kistler, and LaVail.
Lavasa, M. *See* Padh, Lavasa, and Steck.
Law, J. *See* Olden, Law, Hunter, Romain, and Parent.
Lawler, J., and Hynes, R. O. The structure of human thrombospondin, an adhesive glycoprotein with multiple calcium-binding sites and homologies with several different proteins. 103:1635.
—, **Weinstein, R., and Hynes, R. O.** Cell attachment to thrombospondin: the role of ARG-GLY-ASP, calcium, and integrin receptors. 107:2351.
Lawler, J. *See* Ketis, Lawler, Hoover, and Karnovsky.
Lawley, K. *See* Wiedenmann, Lawley, Grund, and Branton.
Lawley, T. J. *See* Kubota, Kleinman, Martin, and Lawley.
Lawrence, J. B. *See* Konieczny, Lawrence, and Coleman.
— *See* Singer, Langevin, and Lawrence.
Lawrie, F. *See* Curtis, Forrester, McInnes, and Lawrie.
Lawson, D. Distribution of epinemin in colloidal gold-labeled quick-frozen deep-etched cytoskeletons. 99:1451.
— Epinemin: a new protein associated with vimentin filaments in non-neural cells. 97:1891.
— *See* Foisner, Leichtfried, Herrmann, Small, Lawson, and Wiche.
— *See* Shapland, Lowings, and Lawson.
Laymon, R. A. *See* Goldstein, Laymon, and McIntosh.
Lazarides, E. *See* Blikstad and Lazarides.
— *See* Breckler and Lazarides.
— *See* Cox, Moon, and Lazarides.
— *See* Cox, Stack, and Lazarides.
— *See* Gomer and Lazarides.
— *See* Granger, Repasky, and Lazarides.
— *See* Hinssen, Vandekerckhove, and Lazarides.
— *See* Moon and Lazarides.
— *See* Moon, Ngai, Wold, and Lazarides.
— *See* Nelson, Granger, and Lazarides.
— *See* Nelson and Lazarides.
— *See* Ngai, Capetanaki, and Lazarides.
— *See* Price and Lazarides.
— *See* Staufenbiel and Lazarides.
— *See* Woods, Boyer, Vogt, and Lazarides.
Lazarou, S. A. *See* Pantazis, Lazarou, and Papadoupoulos.
Lazarovici, P., Dickens, G., Kuzuya, H., and Guroff, G. Long-term heterologous down-regulation of the epidermal growth factor receptor in PC12 cells by nerve growth factor. 104:1611.
Lazarow, P. B. *See* Alexson, Fujiki, Shio, and Lazarow.
— *See* Fujiki, Fowler, Shio, Hubbard, and Lazarow.
— *See* Fujiki, Hubbard, Fowler, and Lazarow.
— *See* Imanaka, Small, and Lazarow.
— *See* Rachubinski, Fujiki, Mortensen, and Lazarow.
— *See* Small and Lazarow.
Lazereg, S. *See* Morel, Marsal, Manaranche, Lazereg, Mazie, and Israel.
Lazzarini, R. A. *See* Dubois-Dalcq, Behar, Hudson, and Lazzarini.
— *See* Hudson, Friedrich, Behar, Dubois-Dalcq, and Lazzarini.
Leach, K. *See* Jaken, Leach, and Klauck.
Leach, K. L., Powers, E. A., Ruff, V. A., Jaken, S., and Kaufmann, S. Type 3 protein kinase C localization to the nuclear envelope of phorbol ester-treated NIH 3T3 cells. 109:685.
Lear, A. L. *See* Jones, Jackson, Price, Patel, Ohanion, Lear, and Critchley.
LeBaron, R. G., Esko, J. D., Woods, A., Johansson, S., and Höök, M. Adhesion of glycoaminoglycan-deficient Chinese hamster ovary cell mutants to fibronectin substrata. 106:945.
Lebeche, D. *See* Henson, Begg, Beaulieu, Fishkind, Bonder, Terasaki, Lebeche, and Kaminer.
Lebel, S., Lampron, C., Royal, A., and Raymond, Y. Lamins A and C appear during retinoic acid-induced differentiation of mouse embryonal carcinoma cells. 105:1099.
LeBivic, A. *See* Lisanti, LeBivic, Sargiacomo, and Rodriguez-Boulan.
LeBlanc, A. C., Földvári, M., Spencer, D. F., Breckenridge, W. C., Fenwick, R. G., Williams, D. L., and Mezei, C. The apolipoprotein A-1 gene is actively expressed in the rapidly myelinating avian peripheral nerve. 109:1245.
Leblond, C. P. *See* Grant, Leblond, Kleinman, Inoué, and Hassell.
— *See* Inoué, Leblond, and Laurie.
— *See* Laurie, Leblond, and Martin.
— *See* Marchi and Leblond.
— *See* Uddin, Altmann, and Leblond.
Lebovitz, H. E. *See* Burch and Lebovitz.
Le Cam, A. *See* Fehlmann, Carpentier, Le Cam, Thamm, Saunders, Brandenburg, Orci, and Freychet.
Leclerc, R. *See* Guy, Leclerc, and Pelletier.
LeCluyse, E. L. *See* Sattilaro, Dentler, and LeCluyse.
Lederkremer, G. *See* Amara, Lederkremer, and Lodish.
Ledger, P. W., Uchida, N., and Tanzer, M. L. Immunocytochemical localization of procollagen and fibronectin in human fibroblasts: Effects of the monovalent ionophore, monensin. 87:663.
LeDizet, M., and Piperno, G. Cytoplasmic microtubules containing acetylated α-tubulin in *Chlamydomonas reinhardtii*: spatial arrangement and properties. 103:13.
— *See* Piperno, LeDizet, and Chang.
Lee, A. *See* Stirling and Lee.
Lee, A. S. *See* Resendez, Ting, Kim, Wooden, and Lee.
— *See* Scharff, Delegeane, and Lee.
Lee, C., Ferguson, M., and Bo Chen, L. Construction of the endoplasmic reticulum. 109:2045.
Lee, D. D. *See* Gerstenfeld, Chipman, Kelly, Hodgens, Lee, and Landis.
Lee, E. Y.-H., Parry, G., and Bissell, M. J. Modulation of secreted proteins of mouse mammary epithelial cells by the collagenous substrata. 98:146.
Lee, H.-C., and Auersperg, N. Calcium in epithelial cell contraction. 85:325.
Lee, J. H. *See* Mar, Lee, Shea, and Walsh.
Lee, J. T. *See* Atkinson and Lee.
Lee, M. G.-S. *See* Lewis, Lee, and Cowan.
Lee, R. W. H. *See* Rosa, Hille, Lee, Zanini, De Camilli, and Huttner.
Lee, S. C., Sabath, D. E., Deutsch, C., and Prystowsky, M. B. Increased voltage-gated potassium conductance during interleukin 2-stimulated proliferation of a mouse helper T lymphocyte clone. 102:1200.
—, **and Steinhardt, R. A.** Observations on intracellular pH during cleavage of eggs of *Xenopus Laevis*. 91:414.
Lee, V. D. *See* Huang, Mengersen, and Lee.
— *See* Huang, Watterson, Lee, and Schibler.
Leech, J. H., Barnwell, J. W., Aikawa, M., Miller, L. H., and Howard, R. J. *Plasmodium falciparum* malaria: association of knobs on the surface of infected erythrocytes with a histidine-rich protein and the erythrocyte skeleton. 98:1256.
— *See* Howard, Uni, Aikawa, Aley, Leech, Lew, Wellems, Rener, and Taylor.
Lefcort, F., and Bentley, D. Organization of cytoskeletal elements and organelles preceding growth cone emergence from an identified neuron in situ. 108:1737.
Lefebvre, P. A. *See* Kindle, Schnell, Fernández, and Lefebvre.
— *See* McKeithan, Lefebvre, Sillflow, and Rosenbaum.
Lefort-Tran, M., Aufderheide, K., Pouphile, M., Rossignol, M., and Beisson, J. Control of exocytotic processes: Cytological and physiological studies of trichocyst mutants in *Paramecium tetraurelia*. 88:301.
— *See* Beisson, Cohen, Lefort-Tran, Pouphile, and Rossignol.
Léger, J. L. *See* Dechesne, Bouvagnet, Walzthöny, and Léger.
Legrès, L. G. *See* Poliard, Bernuau, Tournier, Legrès, Schoevaert, Feldmann, and Sala-Trepat.
Lehner, C. *See* Grove, Kurer, Lehner, Doetschman, Perriard, and Eppenberger.
Lehner, C. F., Stick, R., Eppenberger, H. M., and Nigg, E. A. Differential expression of nuclear lamin proteins during chicken development. 105:577.
— *See* Stick, Angres, Lehner, and Nigg.
Lehnert, M. E., and Lodish, H. F. Unequal synthesis and differential degradation of α and β spectrin during murine erythroid differentiation. 107:413.
Lehninger, A. L. *See* Granger and Lehninger.
Lehr, L. *See* O'Loughlin, Lehr, Havaranis, and Heywood.
Lehrer, S. S. Damage to actin filaments by glutaraldehyde: Protection by tropomyosin. 90:459.
Lehto, V.-P., and Virtanen, I. Immunolocalization of a novel, cytoskeleton-associated polypeptide of M_r 230,000 daltons (p230). 96:703.
— *See* Keski-Oja, Lehto, and Virtanen.
— *See* Laurila, Virtanen, Lehto, Vartio, and Stenman.
— *See* Virtanen, Badley, Paasivuo, and Lehto.
— *See* Wasenius, Saraste, Salvén, Erämaa, Holm, and Lehto.
Lehtola, L. *See* Sistonen, Hölttä, Lehväslaiho, Lehtola, and Alitalo.
Lehtonen, E. *See* Ekblom, Lehtonen, Saxen, and Timpl.
Leichtfried, F. E. *See* Foisner, Leichtfried, Hermann, Small, Lawson, and Wiche.
Leijh, P. C. J. *See* Ince, Coremans, Ypey, Leijh, Verveen, and van Furth.
Leinwand, L. *See* Gatmaitan, Jefferson, Ruiz-Opazo, Beimpica, Arias, Dudas, Leinwand, and Reid.
— *See* Krauter, Leinwand, D'Eustachio, Ruddle, and Darnell.
Leinwand, L. A. *See* De Lozanne, Berlot, Leinwand, and Spudich.
— *See* Feghali and Leinwand.
Leitman, D. C., Benson, S. C., and Johnson, L. K. Glucocorticoids stimulate collagen and noncollagen protein synthesis in cultured vascular smooth muscle cells. 98:541.
Leive, L. *See* Takasaki, Emling, and Leive.
Leivo, I., and Engvall, E. C3d fragment of complement interacts with lami-

nin and binds to basement membranes of glomerulus and trophoblast. 103:1091.
Lemansky, P., Hasilik, A., von Figura, K., Helmy, S., Fishman, J., Fine, R. E., Kedersha, N. L., and Rome, L. H. Lysosomal enzyme precursors in coated vesicles derived from the exocytic and endocytic pathways. 104:1743.
Lemasters, J. J., Stemkowski, C. J., Ji, S., and Thurman, R. G. Cell surface changes and enzyme release during hypoxia and reoxygenation in the isolated, perfused rat liver. 97:778.
Lemmon, S. K., Riley, M. C., Thomas, K. A., Hoover, G. A., Maciag, T., and Bradshaw, R. A. Bovine fibroblast growth factor comparison of brain and pituitary preparations. 95:162.
Lenard, J. *See* Miller, Feuer, Vanderoef, and Lenard.
— *See* Miller, Griffiths, Lenard, and Firestone.
— *See* Miller and Lenard.
— *See* Wilson, Firestone, and Lenard.
Lenglachner-Bachinger, C. *See* Flucher, Lenglachner-Bachinger, Pohlhammer, Adam, and Mollay.
Lenhard, J. M., Siegel, A., and Free, S. J. Developing *Dictyostelium* cells contain the lysosomal enzyme α-mannosidase in a secretory granule. 109:2761.
Lennarz, W. J. *See* Farach-Carson, Carson, Collier, Lennarz, Park, and Wright.
— *See* Kinsey, Decker, and Lennarz.
— *See* Kinsey and Lennarz.
— *See* Roe, Farach, Strittmatter, and Lennarz.
Lentze, M. J. *See* Roth, Lentze, and Berger.
Leof, E. B. *See* Keski-Oja, Blasi, Leof, and Moses.
Leon, A. *See* Facci, Skaper, Favaron, and Leon.
Leonard, D. G. B., Gorham, J. D., Cole, P., Greene, L. A., and Ziff, E. B. A nerve growth factor-regulated messenger RNA encodes a new intermediate filament protein. 106:181.
Leone, J. W. *See* Lin, Leone, Cook, and Allis.
Lepine, J. *See* Gospodarowicz, Lepine, Massoglia, and Wood.
Lerch, V. *See* Peterson and Lerch.
Lerner, A. B. *See* Halaban, Pomerantz, Marshall, Lambert, and Lerner.
Lernmark, Å. *See* Dyrberg, Baekkeskov, and Lernmark.
— *See* Madsen, Larsson, Rechfeld, Schwartz, Lernmark, Labrecque, and Steiner.
Le Sage, G. D. *See* Novikoff, La Russo, Novikoff, Stockert, Yam, and Le Sage.
Leser, G. *See* Fakan, Leser, and Martin.
Leser, G. P., and Martin, T. E. Changes in heterogeneous nuclear RNP core polypeptide complements during the cell cycle. 105:2083.
— *See* Martin, Barghusen, Leser, and Spear.
Leslie, B. A., and Putney, J. W., Jr. Ionic mechanisms in secretagogue-induced morphological changes in rat parotid gland. 97:1119.
Leslie, R. *See* Tippit, Pickett-Heaps, and Leslie.
Leslie, R. J., and Pickett-Heaps, J. D. Ultraviolet microbeam irradiations of mitotic diatoms: investigation of spindle elongation. 96:548.
—, **Saxton, W. M., Mitchison, T. J., Neighbors, B., Salmon, E. D., and McIntosh, J. R.** Assembly properties of fluorescein-labeled tubulin in vitro before and after fluorescent bleaching. 99:2146.
— *See* Salmon, Leslie, Saxton, Karow, and McIntosh.
— *See* Salmon, Saxton, Leslie, Karow, and McIntosh.
— *See* Saxton, Stemple, Leslie, Salmon, Zavortink, and McIntosh.
Lesniak, M. A. *See* Barazzone, Lesniak, Gorden, Van Obberghen, Carpentier, and Orci.
Lessard, J. L. *See* Lin, Eshelman, Forry-Schaudies, Duran, Lessard, and Holtzer.
— *See* Otey, Kalnoski, Lessard, and Bulinski.
— *See* Sawtell and Lessard.
— *See* Wang, Greaser, Schultz, Bulinski, Lin, and Lessard.
LeStourgeon, W. M. *See* Christensen, LeStourgeon, Jamrich, Howard, Serunian, Silver, and Elgin.
— *See* Lothstein, Arenstorf, Chung, Walker, Wall, Wooley, and LeStourgeon.
Leterrier, J.-F., Liem, R. K., and Shelanski, M. L. Preferential phosphorylation of the 150,000 molecular weight component of neurofilaments by a cyclic AMP-dependent, microtubule-associated protein kinase. 90:755.
—, **Liem, R. K. H., and Shelanski, M. L.** Interactions between neurofilaments and microtubule-associated proteins: a possible mechanism for intraorganellar bridging. 95:983.
Letizia, J. *See* Ungar, Piscopo, Letizia, and Holtzman.
Letourneau, P. C. Differences in the organization of actin in the growth cones compared with the neurites of cultured neurons from chick embryos. 97:963.
—, **and Ressler, A. H.** Inhibition of neurite initiation and growth by taxol. 98:1355.
— *See* Ciment, Ressler, Letourneau, and Weston.
— *See* Griffin and Letourneau.
— *See* Lankford and Letourneau.
— *See* Marsh and Letourneau.
— *See* Rogers, Letourneau, Peterson, Furcht, and McCarthy.
Leube, R. E., Bader, B. L., Bosch, F. X., Zimbelmann, R., Achtstaetter, T., and Franke, W. W. Molecular characterization and expression of the stratification-related cytokeratins 4 and 15. 106:1249.
— *See* Bosch, Leube, Achtstätter, Moll, and Franke.
Leung, A. *See* Evans and Leung.
Leung, A. T. *See* Jorgensen, Shen, Arnold, Leung, and Campbell.
Leung, J. T. *See* Ostlund, Leung, and Hajek.
Leung, K.-C. *See* Stephens, Pöllänen, Tapiovaara, Leung, Sim, Salonen, Rønne, Behrendt, Danø, and Vaheri.
Leung, R. *See* de Harven, Leung, and Christensen.
Leutz, A. *See* Urban, Parczyk, Leutz, Kayne, and Kondor-Koch.
Leven, R. M., Mullikin, W. H., and Nachmias, V. T. Role of sodium in adenosine diphosphate- and thrombin-induced megakaryocyte spreading. 96:1234.
—, **and Nachmias, V. T.** Cultured megakaryocytes: changes in the cytoskeleton after ADP-induced spreading. 92:313.
Levenson, R. *See* Bridges, Levenson, Housman, and Cantley.
— *See* Herrera, Emanuel, Ruiz-Opazo, Levenson, and Nadal-Ginard.
Levi, G., Crossin, K. L., and Edelman, G. M. Expression sequence and distribution of two primary cell adhesion molecules during embryonic development of *Xenopus laevis*. 105:2359.
— *See* Daniloff, Levi, Grumet, Rieger, and Edelman.
— *See* Rieger, Nicolet, Pinçon-Raymond, Murawsky, Levi, and Edelman.
Levilliers, N. *See* Geuens, Hill, Levilliers, Adoutte, and De Brabander.
Levin, E. G., and Loskutoff, D. J. Cultured bovine endothelial cells produce both urokinase and tissue-type plasminogen activators. 94:631.
—, **and Santell, L.** Association of a plasminogen activator inhibitor (PAI-1) with the growth substratum and membrane of human endothelial cells. 105:2543.
Levin, E. N. *See* Bloodgood and Levin.
Levine, G. *See* Bergeron, Kotwal, Levine, Bilan, Rachubinski, Hamilton, Shore, and Ghosh.
LeVine, H., III *See* Burgess, Sahyoun, Blanchard, LeVine, Chang, and Cuatrecasas.
Levine, J., and Willard, M. Fodrin: Axonally transported polypeptides associated with the internal periphery of many cells. 90:631.
— *See* Willard, Simon, Baitinger, Levine, and Skene.
Levine, J. F., and Stockdale, F. E. Cell-cell interactions promote mammary epithelial cell differentiation. 100:1415.
Levine, J. S., Allen, R. H., Alpers, D. H., and Seetharam, B. Immunocytochemical localization of the intrinsic factor-cobalamin receptor in dog ileum: distribution of intracellular receptor during cell maturation. 98:1110.
—, **Nakane, P. K., and Allen, R. H.** Human intrinsic factor secretion: Immunocytochemical demonstration of membrane-associated vesicular transport in parietal cells. 90:644.
Levine, R. J. C., Chantler, P. D., and Kensler, R. W. Arrangement of myosin heads on *Limulus* thick filaments. 107:1739.
—, **Kensler, R. W., Reedy, M. C., Hofmann, W., and King, H. A.** Structure and paramyosin content of Tarantula thick filaments. 97:186.
— *See* Kensler and Levine
— *See* Kensler, Levine, and Stewart.
— *See* Stewart, Kensler, and Levine.
Levine, S. P. *See* Stenberg, Shuman, Levine, and Bainton.
Levinger, L., and Varshavsky, A. Heat-shock proteins of *Drosophila* are associated with nuclease-resistant, high-salt-resistant nuclear structures. 90:793.
Levitsky, H. I. *See* Zigmond, Levitsky, and Kreel.
Levitt, D., and Ho. P.-L. Induction of chondroitin sulfate proteoglycan synthesis and secretion in lymphocytes and monocytes. 97:351.
Levitt-Gilmour, T. *See* Salpeter, Cooper, and Levitt-Gilmour.
Levy, D. *See* Winter, Levy, and Gordon.
Levy, E. *See* Hochman, Levy, Mador, Gottesman, Shearer, and Okon.
Levy, M. A. *See* Collier, Heuser, Levy, and Schlesinger.
Lew, A. M. *See* Howard, Uni, Aikawa, Aley, Leech, Lew, Wellems, Rener, and Taylor.
Lew, D. P. *See* Hashimoto, Bruno, Lew, Pozzan, Volpe, and Meldolesi.
— *See* Iacopetta, Carpentier, Pozzan, Lew, Gorden, and Orci.
—, **Monod, A., Waldvogel, F. A., Dewald, B., Baggiolini, M., and Pozzan, T.** Quantitative analysis of the cytosolic free calcium dependency of exocytosis from three subcellular compartments in intact human neutrophils. 102:2197.
—, **Wollheim, C. B., Waldvogel, F. A., and Pozzan, T.** Modulation of

cytosolic-free calcium transients by changes in intracellular calcium buffering capacity: correlation with exocytosis and O_2-production in human neutrophils. 99:1208.

Lew, V. L., Hockaday, A., Freeman, C. J., and Bookchin, R. M. Mechanism of spontaneous inside-out vesiculation of red cell membranes. 106:1893.

Lewandowska, K., Choi, H. U., Rosenberg, L. C., Zardi, L., and Culp, L. A. Fibronectin-mediated adhesion of fibroblasts: inhibition by dermatan sulfate proteoglycan and evidence for a cryptic glycosaminoglycan-binding domain. 105:1443.

— *See* Mugnai, Lewandowska, Carnemolla, Zardi, and Culp.

Lewin, A. *See* Broughton, Wong, Lewin, Samrey, Myint, Meyer, Dowling, and Simon.

Lewis, B. H. See Wagner, Mayadas, Urban-Pickering, Lewis, and Marder.

Lewis, B. L. *See* Yoshino, Dinneen, Lewis, Meador-Woodruff, and DeVries.

Lewis, J. A., Biedler, J. L., and Melera, P. W. Gene amplification accompanies low level increases in the activity of dihydrofolate reductase in antifolate-resistant Chinese hamster lung cells containing abnormally banding chromosomes. 94:418.

Lewis, J. B. *See* Trüeb, Lewis, and Carter.

Lewis, R. A. *See* Caulfield, Lewis, Hein, and Austen.

Lewis, R. G. *See* Wolf, Hagopian, Lewis, Voglmayr, and Fairbanks.

Lewis, R. M., and Nelson, D. L. Biochemical studies of the excitable membrane of *Paramecium tetraurelia*. VI. Endogenous protein substrates for in vitro and in vivo phosphorylation in cilia and ciliary membranes. 91:167.

— *See* Adoutte, Ramanathan, Lewis, Dute, Ling, Kung, and Nelson.

Lewis, S. A., and Cowan, N. J. Complex regulation and functional versatility of mammalian α- and β-tubulin isotypes during the differentiation of testis and muscle cells. 106:2023.

—, **and Cowan, N. J.** Genetics, evolution, and expression of the 68,000-mol-wt neurofilament protein: isolation of a cloned cDNA probe. 100:843.

—, **Lee, M. G.-S., and Cowan, N. J.** Five mouse tubulin isotypes and their regulated expression during development. 101:852.

—, **Sherline, P., and Cowan, N. J.** A cloned cDNA encoding MAP1 detects a single copy gene in mouse and a brain-abundant RNA whose level decreases during development. 102:2106.

—, **Villasante, A., Sherline, P., and Cowan, N. J.** Brain-specific expression of MAP2 detected using a cloned cDNA probe. 102:2089.

— *See* Aletta, Lewis, Cowan, and Greene.

— *See* Gu, Lewis, and Cowan.

— *See* Noble, Lewis, and Cowan.

— *See* Wang, Villasante, Lewis, and Cowan.

Lewis, S. E., and Nixon, R. A. Multiple phosphorylated variants of the high molecular mass subunit of neurofilaments in axons of retinal cell neurons: characterization and evidence for their differential association with stationary and moving neurofilaments. 107:2691.

Lewis, V., Green, S. A., Marsh, M., Vihko, P., Helenius, A., and Mellman, I. Glycoproteins of the lysosomal membrane. 100:1839.

Leys, E. J., Crouse, G. F., and Kellems, R. E. Dihydrofolate reductase gene expression in cultured mouse cells is regulated by transcript stabilization in the nucleus. 99:180.

Leyton, L., and Saling, P. Evidence that aggregation of mouse sperm receptors by ZP3 triggers the acrosome reaction. 108:2163.

Lezzi, M. *See* Dreesen, Lezzi, and Case.

L'Hernault, S. W., and Rosenbaum, J. L. *Chlamydomonas* α-tubulin is posttranslationally modified in flagella during assembly. 97:258.

—, **and Rosenbaum, J. L.** Reversal of the posttranslational modification on *Chlamydomonas* flagellar α-tubulin occurs during flagellar resorption. 100:457.

— *See* Greer, Maruta, L'Hernault, and Rosenbaum.

Li, J.-M., Hopper, A. K., and Martin, N. C. N^2,N^2-Dimethyl-guanosine-specific tRNA methyltransferase contains both nuclear and mitochondrial targeting signals in *Saccharomyces cerevisiae*. 109:1411.

Li, R., and Thomas, J. O. Identification of a human protein that interacts with nuclear localization signals. 109:2623.

Liau, G., Ong, D. E., and Chytil, F. Interaction of the retinol/cellular retinol-binding protein complex with isolated nuclei and nuclear components. 91:63.

Libera, L. D. *See* Sartore, Gorza, Bormioli, Libera, and Schiaffino.

Libresco, S. *See* Bischoff, Libresco, Shia, and Lodish.

Lica, L. M., Narayanswami, S., and Hamkalo, B. A. Mouse satellite DNA, centromere structure, and sister chromatid pairing. 103:1145.

Licht, M. R. *See* Wright, Licht, Craigmyle, and Silverstein

Lichtenberg, B. *See* Hagstedt, Lichtenberg, Wille, Mandelkow, and Mandelkow.

Lichtenstein, L. M. *See* Dvorak, Hammel, Schulman, Peters, MacGlashan, Schleimer, Newball, Pyne, Dvorak, Lichtenstein, and Galli.

— *See* Hammel, Dvorak, Peters, Schulman, Dvorak, Lichtenstein, and Galli.

Lichtman, M. A. *See* Wallace, Wersto, Packman, and Lichtman.

Lieber, M. R., Hesse, J. E., Nickol, J. M., and Felsenfeld, G. The mechanism of osmotic transfection of avian embryonic erythrocytes: analysis of a system for studying developmental gene expression. 105:1055.

Lieberman, M. A. *See* Grupp, Lieberman, and Harmony.

Lieberman, S. J., Wasco, W., MacLeod, J., Satir, P., and Orr, G. A. Immunogold localization of the regulatory subunit of a type II cAMP-dependent protein kinase tightly associated with mammalian sperm flagellæ. 107:1809.

Liebermann, L. *See* Cajot, Schleuning, Medcalf, Bamat, Testuz, Liebermann, and Sordat.

Liegey, F. *See* Gorvel, Mishal, Liegey, Rigal, and Maroux.

Liem, R. K. *See* Hatten and Liem.

— *See* Leterrier, Liem, and Shelanksi.

Liem, R. K. H. *See* Edmondson, Liem, Kuster, and Hatten.

— *See* Greene, Liem, and Shelanski.

— *See* Hatten, Liem, and Mason.

— *See* Leterrier, Liem, and Shelanski.

— *See* Napolitano, Pachter, Chin, and Liem.

— *See* Pachter and Liem.

— *See* Wang, Cairncross, Yung, Garber, and Liem.

Lienhard, G. E. *See* Blok, Gibbs, Lienhard, Slot, and Geuze.

— *See* Tanner and Lienhard.

Lienhard, S. *See* Mattaj, Lienhard, Zeller, and DeRobertis.

Liesi, P., Dahl, D., and Vaheri, A. Laminin is produced by early rat astrocytes in primary culture. 96:920.

Lieska, N., Yang, H.-Y., and Goldman, R. D. Purification of the 300K intermediate filament-associated protein and its in vitro recombination with intermediate filaments. 101:802.

— *See* Yang, Lieska, Goldman, and Goldman.

Lietman, T. *See* Wistow, Lietman, Williams, Stapel, de Jong, Horwitz, and Piatigorsky.

Lightner, V. A., Gumkowski, F., Bigner, D. D., and Erickson, H. P. Tenascin hexabrachion in human skin: biochemical identification and localization by light and electron microscopy. 108:2483.

Lilien, J. *See* Bixby, Lilien, and Reichardt.

— *See* Grunwald, Geller, and Lilien.

— *See* Neugebauer, Tomaselli, Lilien, and Reichardt.

Lim, R. W., and Hauschka, S. D. A rapid decrease in epidermal growth factor-binding capacity accompanies the terminal differentiation of mouse myoblasts in vitro. 98:739.

Lim, S.-S., Sammak, P. J., and Borisy, G. G. Progressive and spatially differentiated stability of microtubules in developing neuronal cells. 109:253.

Lin, C.-T., Dedman, J. R., Brinkley, B. R., and Means, A. R. Localization of calmodulin in rat cerebellum by immunoelectron microscopy. 85:473.

Lin, D. C., Dugan Tobin K., Grumet, M., and Lin, S. Cytochalasins inhibit nuclei-induced actin polymerization by blocking filament elongation. 84:455.

Lin, H.-P. P. *See* Church and Lin.

— *See* Church, Nicklas, and Lin.

Lin, J. J.-C., Hegmann, T. E., and Lin, J. L.-C. Differential localization of tropomyosin isoforms in cultured nonmuscle cells. 107:563.

—, **Helfman, D. M., Hughes, S. H., and Chou, C.-S.** Tropomyosin isoforms in chicken embryo fibroblasts: purification, characterization, and changes in Rous sarcoma virus-transformed cells. 100:692.

—, **and Lin, J. L.-C.** Assembly of different isoforms of actin and tropomyosin into the skeletal tropomyosin-enriched microfilaments during differentiation of muscle cells in vitro. 103:2173.

—, **Matsumura, F., and Yamashiro-Matsumura, S.** Tropomyosin-enriched and alpha-actinin-enriched microfilaments isolated from chicken embryo fibroblasts by monoclonal antibodies. 98:116.

—, **and Queally, S. A.** A monoclonal antibody that recognizes Golgi-associated protein of cultured fibroblast cells. 92:108.

— *See* Hegmann, Lin, and Lin.

— *See* Lourim and Lin

— *See* Wang, Greaser, Schultz, Bulinski, Lin, and Lessard.

Lin, J. L.-C. *See* Hegmann, Lin, and Lin.

— *See* Lin, Hegmann, and Lin.

— *See* Lin and Lin.

Lin, M. *See* Roth, Lin, and Prescott.

Lin, R., Leone, J. W., Cook, R. G., and Allis, C. D. Antibodies specific to acetylated histones document the existence of deposition- and transcription-related histone acetylation in *Tetrahymena*. 108:1577.

Lin, S. *See* Lin, Dugan, Tobin, Grumet, and Lin.

— *See* Wilkens and Lin.

— *See* Wilkins, Risinger, and Lin.

Lin, Z., Eshelman, J. R., Forry-Schaudies, S., Duran, S., Lessard, J. L.,

and Holtzer, H. Sequential disassembly of myofibrils induced by myristate acetate in cultured myotubes. 105:1365.
—, **Eshleman, J., Grund, C., Fischman, D. A., Masaki, T., Franke, W. W., and Holtzer, H.** Differential response of myofibrillar and cytoskeletal proteins in cells treated with phorbol myristate acetate. 108:1079.
—, **Holtzer, S., Schultheiss, T., Murray, J., Masaki, T., Fischman, D. A., and Holtzer, H.** Polygons and adhesion plaques and the disassembly and assembly of myofibrils in cardiac myocytes. 108:2355.
— *See* Hill, Duran, Lin, Weber, and Holtzer.
Linberg, K. A. *See* Vaughan, Fisher, Bernstein, Hale, Linberg, and Matsumoto.
Linck, R. W., Amos, L. A., and Amos, W. B. Localization of tektin filaments in microtubules of sea urchin sperm flagella by immunoelectron microscopy. 100:126.
—, **and Langevin, G. L.** Reassembly of flagellar B(αβ) tubulin into singlet microtubules: consequences for cytoplasmic microtubule structure and assembly. 89:323.
—, **Olson, G. E., and Langevin, G. L.** Arrangement of tubulin subunits and microtubule-associated proteins in the central-pair microtubule apparatus of squid (*Loligo pealei*) sperm flagella. 89:309.
—, **and Stephens, R. E.** Biochemical characterization of tektins from sperm flagellar doublet microtubules. 104:1069.
— *See* Swan, Linck, Ito, and Fawcett.
— *See* Woodrum and Linck.
Lind, S. E., Janmey, P. A., Chaponnier, C., Herbert, T.-J., and Stossel, T. P. Reversible binding of actin to gelsolin and profilin in human platelet extracts. 105:833.
Lindahl, U. *See* Stamatoglou, Hughes, and Lindahl.
Lindau, M. *See* Nüße and Lindau.
Lindemann, C. B., Fentie, I., and Rikmenspoel, R. A selective effect of Ni^{2+} on wave initiation in bull sperm flagella. 87:420.
Linder, S., Zuckerman, S. H., and Ringertz, N. R. Pattern of chick gene activation in chick erythrocyte heterokaryons. 95:885.
Lindley, S. *See* Heidemann, Hamborg, Thomas, Song, Lindley, and Chu.
Lindquist, S. *See* Rossi and Lindquist.
— *See* Velazquez, Sonoda, Bugaisky, and Lindquist.
Lindroth, M. *See* Särndahl, Lindroth, Bengtsson, Fällman, Gustavsson, Stendahl, and Andersson.
Lindsey, J. D. *See* Adler, Lindsey, and Elsner.
— *See* Hammerschlag, Stone, Bolen, Lindsey, and Ellisman.
Lindstrom, J. *See* Black, Goldman, Hochschwender, Lindstrom, and Hall.
— *See* Kubalck, Ralston, Lindstrom, and Unwin.
Lindstrom, J. M. *See* Jacob, Lindstrom, and Berg.
— *See* Sargent, Hedges, Tsavaler, Clemmons, Tzartos, and Lindstrom.
Ling, K.-Y. *See* Adoutte, Ramanathan, Lewis, Dute, Ling, Kung, and Nelson.
Ling, N. *See* Schubert, Ling, and Baird.
Lingappa, V. R. *See* Andrews, Lauffer, Walter, and Lingappa.
— *See* Faust, Wall, Perara, Lingappa, and Kornfeld.
— *See* Perara and Lingappa.
— *See* Simon, Lingappa, and Ganem.
— *See* Simon, Perara, and Lingappa.
Lingelbach, J. *See* Pierce, Mustoe, Lingelbach, Masakowski, Griffin, Senior, and Deuel.
Lingg, G. *See* Patzak, Böck, Fischer-Colbrie, Schauenstein, Schmidt, Lingg, and Winkler.
Lingwood, C., and Schachter, H. Localization of sulfatoxygalactosylacylalkylglycerol at the surface of rat testicular germinal cells by immunocytochemical techniques; pH dependence of a nonimmunological reaction between immunoglobulin and germinal cells. 89:621.
Linker, A. *See* Kanwar, Linker, and Farquhar.
Linkhart, T. A. *See* Clegg, Linkhart, Olwin, and Hauschka.
Linneman, D. *See* Nybroe, Albrechtsen, Dahlin, Linneman, Lyles, Møller, and Bock.
Linnemann, D. *See* Lyles, Linnemann, and Bock.
Linnemans, W. A. M. *See* Wiegant, Blok, Defize, Linnemans, Verkley, and Boonstra.
Linsenmayer, T. F., Fitch, J. M., Schmid, T. M., Zak, N. B., Gibney, E., Sanderson, R. D., and Mayne, R. Monoclonal antibodies against chick type V collagen: production, specificity, and use for immunocytochemical localization of embryonic cornea and other organs. 96:124.
—, **Gibney, E., and Fitch, J. M.** Embryonic avian cornea contains layers of collagen with greater than average stability. 103:1587.
—, **Gibney, E., Fitch, J. M., Gross, J., and Mayne, R.** Thermal stability of the helical structure of type IV collagen within basement membranes in situ: determination with a conformation-dependent monoclonal antibody. 99:1405.
— *See* Birk, Fitch, Babiarz, and Linsenmayer.
— *See* Fitch, Gibney, Sanderson, Mayne, and Linsenmayer.
— *See* Fitch, Mayne, and Linsenmayer.
— *See* Mayne, Wiedemann, Irwin, Sanderson, Fitch, Linsenmayer, and Kühn.
— *See* Sanderson, Fitch, Linsenmayer, and Mayne.
— *See* Schmid and Linsenmayer.
Liotta, L. *See* Yannariello-Brown, Wewer, Liotta, and Madri.
Liotta, L. A. *See* Russo, Liotta, Thorgeirsson, Brundage, and Schiffmann.
— *See* Taraboletti, Roberts, and Liotta.
Liou, G. I. *See* Gonzalez-Fernandez, Landers, Glazebrook, Fong, Liou, Lam, and Bridges.
— *See* Hollyfield, Varner, Rayborn, Liou, and Bridges.
Lipp, J., and Dobberstein, B. Signal and membrane anchor functions overlap in the type II membrane protein lyCAT. 106:1813.
—, **and Dobberstein, B.** Signal recognition particle-dependent membrane insertion of mouse invariant chain: a membrane-spanning protein with a cytoplasmically exposed amino terminus. 102:2169.
—, **Flint, N., Haeuptle, M.-T., and Dobberstein, B.** Structural requirements for membrane assembly of proteins spanning the membrane several times. 109:2013.
Lippincott-Schwartz, J., and Fambrough, D. M. Lysosomal membrane dynamics: structure and interorganellar movement of a major lysosomal membrane glycoprotein. 102:1593.
— *See* Bonifacino, Suzuki, Lippincott-Schwartz, Weissman, and Klausner.
— *See* Fambrough, Takeyasu, Lippincott-Schwartz, and Siegel.
Lippoldt, R. E. *See* Heuser, Keen, Amende, Lippoldt, and Prasad.
Lipsky, N. G., and Pagano, R. E. Intracellular translocation of fluorescent sphingolipids in cultured fibroblasts: endogenously synthesized sphingomyelin and glucocerebroside analogues pass through the Golgi apparatus en route to the plasma membrane. 100:27.
Lirette, M. *See* Gospodarowicz, Cheng, and Lirette.
Lisanti, M. P., Caras, I. W., Davitz, M. A., and Rodriguez-Boulan, E. A glycophospholipid membrane anchor acts as an apical targeting signal in polarized epithelial cells. 109:2145.
—, **LeBivic, A., Sargiacomo, M., and Rodriguez-Boulan, E.** Steady-state distribution and biogenesis of endogenous Madin-Darby canine kidney glycoproteins: evidence for intracellular sorting and polarized cell surface delivery. 109:2117.
Lischwe, M. A. *See* Bennett, Busch, Lischwe, and Yeoman.
Liscum, L., Hauptman, P. J., Hood, D. C., and Holtzman, E. Effects of barium and tetraethylammonium on membrane circulation in frog retinal photoreceptors. 95:296.
—, **Ruggiero, R. M., and Faust, J. R.** The intracellular transport of low density lipoprotein-derived cholesterol is defective in Niemann-Pick type C fibroblasts. 108:1625.
Lissitzky, S. *See* Fayet, Hovsépian, Dickson, and Lissitzky.
Litoff, D. *See* Lopez, Bayna, Litoff, Shaper, Shaper, and Shur.
Littau, V. C. *See* Cheung, Drivas, Littau, and Johnson.
Littauer, U. Z. *See* Scherson, Kreis, Schlessinger, Littauer, Borisy, and Geiger.
Little, C. D. *See* Chen and Little.
Little, J. E. *See* Chaly, Bladon, Setterfield, Little, Kaplan, and Brown.
Little, S. A. *See* McGuffee, Hurwitz, Little, and Skipper.
Liu, A. Y.-C. *See* Culpepper and Liu.
Liu, L. F. *See* Earnshaw, Halligan, Cooke, Heck, and Liu.
Liu, M. K. *See* Roditi, Schwarz, Pearson, Beecroft, Liu, Richardson, Bühring, Pleiss, Bülow, Williams, and Overath.
Liu, S.-C., Derick, L. H., and Palek, J. Visualization of the hexagonal lattice in the erythrocyte membrane skeleton. 104:527.
Liu, S.-H. *See* Durkin, Chakravarti, Bartos, Liu, Friedman, and Chung.
Liu, X., Bell, A. W., Freeman, K. B., and Shore, G. C. Topogenesis of mitochondrial inner membrane uncoupling protein. Rerouting transmembrane segments to the soluble matrix compartment. 107:503.
Liu, Z.-Y., Young, J.-I., and Elson, E. L. Rat basophilic leukemia cells stiffen when they secrete. 105:2933.
— *See* McCloskey, Liu, and Poo.
Livengood, D. R. *See* Gallin and Livengood.
Liverani, D. *See* Mackie, Halfter, and Liverani.
Livingston, D. *See* Chung, Alavi, Livingston, Hiller, and Taub.
Livneh, E., Benveniste, M., Prywes, R., Felder, S., Kam, Z., and Schlessinger, J. Large deletions in the cytoplasmic kinase domain of the epidermal growth factor receptor do not affect its lateral mobility. 103:327.
— *See* Benveniste, Livneh, Schlessinger, and Kam.
Lizarbe, M. A. *See* Mollenhauer, Bee, Lizarbe, and von der Mark.
Lizardi, P. M. Isolation of giant silk fibroin polysomes and fibroin mRNP particles using a novel ribonuclease inhibitor, hydroxystilbamidine. 87:292.
Lloyd, C. E., and Ascoli, M. On the mechanisms involved in the regula-

tion of the cell-surface receptors for human choriogonadotropin and mouse epidermal growth factor in cultured Leydig tumor cells. 96:521.
Lloyd, C. W. *See* Clayton, Black, and Lloyd.
— *See* Dawson, Hulme, and Lloyd.
— *See* Traas, Doonan, Rawlins, Shaw, Watts, and Lloyd.
Lo, C. W. *See* Kalimi and Lo.
Lo, M-V. C. *See* Schinz, Lo, Larrivee, and Pak.
Locatelli, E. K. *See* Stoppelli, Verde, Grimaldi, Locatelli, and Blasi.
Locke, S. J. *See* Beckerle, Miller, Bertagnolli. and Locke.
Lockwood, A. H. *See* Browne, Lockwood, Su, Beavo, and Steiner.
Lodish, H. F., and Kong, N. Glucose removal from N-linked oligosaccharides is required for efficient maturation of certain secretory glycoproteins from the rough endoplasmic reticulum to the Golgi complex. 98:1720.
—, **Kong, N., Hirani, S., and Rasmussen, J.** A vesicular intermediate in the transport of hepatoma secretory proteins from the rough endoplasmic reticulum to the Golgi complex. 221.
— *See* Amara, Lederkremer, and Lodish.
— *See* Bernardi, Patel, and Lodish.
— *See* Bischoff, Libresco, Shia, and Lodish.
— *See* Geuze, Slot, Strous, Lodish, and Schwartz.
— *See* Lehnert and Lodish.
— *See* Patel and Lodish.
— *See* Strous, Willemsen, van Kerkhof, Slot, Geuze, and Lodish.
Loeb, A. *See* Owens, Loeb, Gordon, and Thompson.
Loeb, D. M. *See* Volonté, Rukenstein, Loeb, and Greene.
Loewenstein, W. R. *See* Keane, Mehta, Rose, Honig, Loewenstein, and Rutishauser.
— *See* Mehta, Bertram, and Loewenstein.
Loewy, A. *See* Cole, Loewy, Cross, Akeson, and Glaser.
Loftus, D. *See* Angelides, Elmer, Loftus, and Elson.
Loftus, D. J. *See* Cooper, Bryan, Schwab, Frieden, Loftus, and Elson.
— *See* Cooper, Loftus, Frieden, Bryan, and Elson.
— *See* Dubinsky, Loftus, Fischbach, and Elson.
Loftus, J. C., and Albrecht, R. M. Redistribution of the fibrinogen receptor of human platelets after surface activation. 99:822.
—, **Choate, J., and Albrecht, R. M.** Platelet activation and cytoskeletal reorganization: high voltage electron microscopic examination of intact Triton-extracted whole mounts. 98:2019.
Logeat, F. *See* Perrot-Applanat, Groyer-Picard, Logeat, and Milgrom.
Logsdon, C. D., Moessner, J., Williams, J. A., and Goldfine, I. D. Glucocorticoids increase amylase mRNA levels, secretory organelles, and secretion in pancreatic acinar AR42J cells. 100:1200.
Logvinenko, K. B. *See* Nixon and Logvinenko.
Lohka, M. J., and Maller, J. L. Induction of nuclear envelope breakdown, chromosome condensation, and spindle formation in cell-free extracts. 101:518.
—, **and Masui, Y.** Roles of cytosol and cytoplasmic particles in nuclear envelope assembly and sperm pronuclear formation in cell-free preparations from amphibian eggs. 98:1222.
Lohmann, S. M. *See* De Camilli, Moretti, Donini, Walter, and Lohmann.
Loidl, P. *See* Gröbner and Loidl.
Lombardi, T., Montesano, R., Furie, M. B., Silverstein, S. C., and Orci, L. Endothelial diaphragmed fenestrae: in vitro modulation by phorbol myristate acetate. 102:1965.
Longenecker, J. P., Kilty, L. A., and Johnson, L. K. Glucocorticoid inhibition of vascular smooth muscle cell proliferation: influence of homologous extracellular matrix and serum mitogens. 98:534.
Longmuir, K. J. *See* Pagano, Longmuir, Martin, and Struck.
Longo, F. J., Krohne, G., and Franke, W. W. Basic proteins of the perinuclear theca of mammalian spermatozoa and spermatids: a novel class of cytoskeletal elements. 105:1105.
Longo, F. M. *See* Manthorpe, Engvall, Ruoslahti, Longo, Davis, and Varon.
Lonsdale-Eccles, J. D. *See* Grab, Webster, Ito, Fish, Verjee, and Lonsdale-Eccles.
Look, J. *See* Traub, Look, Dermietzel, Brümmer, Hülser, and Willecke.
Lopata, M. A., and Cleveland, D. W. In vivo microtubules are copolymers of available β-tubulin isotypes: localization of each of six vertebrate β-tubulin isotypes using polyclonal antibodies elicited by synthetic peptide antigens. 105:1707.
Lopez, L. C., Bayna, E. M., Litoff, D., Shaper, N. L., Shaper, J. H., and Shur, B. D. Receptor function of mouse sperm surface galactosyltransferase during fertilization. 101:1501.
—, **and Shur, B. D.** Redistribution of mouse sperm surface galactosyltransferase after the acrosome reaction. 105:1663.
Lopez, M. C. *See* Lancillotti, Lopez, Alonso, and Stollar.
Lopez-Rivas, A. *See* Mendoza, Schneider, Lopez-Rivas, Sinnett-Smith, and Rozengurt.
Lorand, L. *See* Gudewicz, Molnar, Lai, Beezhold, Siefring, Credo, and Lorand.
Loret, C. *See* Schreiber, Kenney, Kowalski, Thomas, Gimenez-Gallego, Rios-Candelore, Di Salvo, Barritault, Courty, Courtois, Moenner, Loret, Burgess, Mehlman, Friesel, Johnson, and Maciag.
Lories, V. *See* David, Lories, Heremans, Van Der Schueren, Cassiman, and Van Den Berghe.
Lormeau, J.-C. *See* Castellot, Choay, Lormeau, Petitou, Sache, and Karnovsky.
Losa, G. *See* Bolender, Paumgartner, Muellener, Losa, and Weibel.
Loskutoff, D. J. *See* Levin and Loskutoff.
Lothstein, L., Arenstorf, H. P., Chung, S.-Y., Walker, B. W., Wall, J., Wooley, J. C., and LeStourgeon, W. M. General organization of protein in HeLa 40S nuclear ribonucleoprotein particles. 100:1570.
Lotti, L. V. *See* Torrisi, Lotti, Pavan, Migliaccio, and Bonatti.
Lottspeich, F. *See* Noegel, Rapp, Lottspeich, Schleicher, and Stewart.
— *See* Witke, Schleicher, Lottspeich, and Noegel.
Lotz, M. M., Burdsal, C. A., Erickson, H. P., and McClay, D. R. Cell adhesion to fibronectin and tenascin: quantitative measurements of initial binding and subsequent strengthening response. 109:1795.
Louis, C. F. *See* Johnson, Lampe, Hur, Louis, and Johnson.
Louisot, P. *See* Capony, Morisset, Barrett, Capony, Broquet, Vignon, Chambon, Louisot, and Rochefort.
Lourim, D., and Lin, J. J.-C. Expression of nuclear lamin A and muscle-specific proteins in differentiating muscle cells in ovo and in vitro. 109:495.
Louvard, D., Reggio, H., and Warren, G. Antibodies to the Golgi complex and the rough endoplasmic reticulum. 92:92.
— *See* Arpin, Pringault, Finidori, Garcia, Jeltsch, Vandekerckhove, and Louvard.
— *See* Baron, Neff, Brown, Courtoy, Louvard, and Farquhar.
— See Baron, Neff, Louvard, and Courtoy.
— *See* Dudouet, Robine, Huet, Sahuquillo-Merino, Blair, Coudrier, and Louvard.
— *See* Garcia, Coudrier, Carboni, Anderson, Vandekerkhove, Mooseker, Louvard, and Arpin.
— *See* Goud, Huet, and Louvard.
— *See* Griffiths, Brands, Burke, Louvard, and Warren.
— *See* Huet, Sahuquillo-Merino, Coudrier, and Louvard.
— *See* Matlin, Bainton, Pesonen, Louvard, Genty, and Simons.
— *See* Meyer, Louvard, and Dobberstein.
— *See* Moya, Dautry-Varsat, Goud, Louvard, and Boquet.
— *See* Reggio, Bainton, Harms, Coudrier, and Louvard.
— *See* Tougard, Louvard, Picart, and Tixier-Vidal.
Lovrien, R. E., and Anderson, R. A. Stoichiometry of wheat germ agglutinin as a morphology controlling agent and as a morphology protective agent for the human erythrocyte. 85:534.
Low, R. B., Woodcock-Mitchell, J., Mitchell, J. J., Arnold, J., and Absher, P. M. Synthesis of cytoskeletal and contractile proteins by cultured IMR-90 fibroblasts. 101:500.
— *See* Besterman, Airhart, Low, and Rannels.
— *See* Besterman, Airhart, Woodworth, and Low.
Lowe, A. W., Madeddu, L., and Kelly, R. B. Endocrine secretory granules and neuronal synaptic vesicles have three integral membrane proteins in common. 106:51.
— *See* Matsuuchi, Buckley, Lowe, and Kelly.
Lowenhaupt, K. *See* Hill, Mott, Burnett, Abmayr, Lowenhaupt, and Elgin.
Lowey, S. *See* Trybus and Lowey.
— *See* Gauthier, Burke, Lowey, and Hobbs.
— *See* Gauthier, Lowey, Benfield, and Hobbs.
— *See* Katoh and Lowey.
Lowings, P. *See* Shapland, Lowings, and Lawson.
Lowrey, C. *See* Neff, Lowrey, Decker, Tovar, Damsky, Buck, and Horwitz.
Lowry, O. H. *See* Martin, Schmidt, DiStefano, Lowry, Carter, and Johnson.
Lu, P. L. *See* Gown, Vogel, Gordon, and Lu.
Luba, A. *See* King, Hyams, and Luba.
Lubit, B. W., and Schwartz, J. H. An antiactin antibody that distinguishes between cytoplasmic and skeletal muscle actins. 86:891.
— *See* Hall, Lubit, and Schwartz.
Lubs-Haukeness, J. *See* Klein, Lubs-Haukeness, and Simons.
Luby-Phelps, K., Lanni, F., and Taylor, D. L. Behavior of a fluorescent analogue of calmodulin in living 3T3 cells. 101:1245.
—, **Taylor, D. L., and Lanni, F.** Probing the structure of cytoplasm. 102:2015.
Luca, F. C., and Ruderman, J. V. Control of programmed cyclin destruction in a cell-free system. 109:1895.
— *See* Bloom, Luca, and Vallee.
Lucas, C. M. *See* Burns, Lucas, Krissansen, Werkmeister, Scanlon, Simpson, and Vadas.
Lucas, J. J. *See* Gordon, Bruno, and Lucas
— *See* LaFond, Woodcock, Woodcock, Kundahl, and Lucas.
Lucas, R. C. *See* Rosenberg, Stracher, and Lucas.

Lucas, W. J. *See* Pesacreta and Lucas.
Lucchesi, J. C. *See* Cavagnaro, Pierce, Lucchesi, and Chae.
Lucia-Jandris, P. *See* Weltzin, Lucia-Jandris, Michetti, Fields, Kraehenbuhl, and Neutra.
Luck, D. J. *See* Adams, Huang, Piperno, and Luck.
Luck, D. J. L. Genetic and biochemical dissection of the eucaryotic flagellum. 98:789.
— *See* Brokaw, Luck, and Huang.
— *See* Dutcher, Huang, and Luck.
— *See* Huang, Piperno, Ramanis, and Luck.
— *See* Piperno, Huang, Ramanis, and Luck.
— *See* Segal, Huang, Ramanis, and Luck.
— *See* Segal and Luck.
Lucke, S. *See* Carraro, Morale, Mussini, Lucke, Cantini, Betto, Catani, Dalla Libera, Betto, and Noventa.
Lucocq, J. *See* Smythe, Pypaert, Lucocq, and Warren.
Lucocq, J. M., Berger, E. G., and Warren, G. Mitotic Golgi fragments in HeLa cells and their role in the reassembly pathway. 109:463.
—, Brada, D., and Roth, J. Immunolocalization of the oligosaccharide trimming enzyme glucosidase II. 102:2137.
—, Pryde, J. G., Berger, E. G., and Warren, G. A mitotic form of the Golgi apparatus in HeLa cells. 104:865.
Ludosky, M. A. *See* Cartaud, Courvalin, Ludosky, and Cartaud.
Luduena, R. F., Fellous, A., Francon, J., Nunez, J., and McManus, L. Effect of tau on the vinblastine-induced aggregation of tubulin. 89:680.
Ludwig, M., and Gibbs, S. P. Localization of phycoerythrin at the lumenal surface of the thylakoid membrane in *Rhodomonas lens*. 108:875.
Luftig, R. B. *See* Weatherbee, Sherline, Mascardo, Izant, Luftig, and Weihing.
Lukasiewicz, H. *See* Gustafson, Lukasiewicz, Wachtfogel, Norton, Schmaier, Niewiarowski, and Colman.
Lukeman, D. S. *See* Brunschwig, Brandt, Caswell, and Lukeman.
Lumley-Sapanski, K. *See* Wojcieszyn, Schlegel, Lumley-Sapanski. and Jacobson.
Lumpert, C. J. *See* Momayezi, Lumpert, Kersken, Gras, Plattner. Krinks, and Klee.
Luna, E. J., Fowler, V. M., Swanson, J., Branton, D., and Taylor D. L. A membrane cytoskeleton from *Dictyostelium discoideum*. I. Identification and partial characterization of an actin-binding activity. 88:396.
—, Goodloe-Holland, C. M., and Ingalls, H. M. A membrane cytoskeleton from *Dictyostelium discoideum*. II. Integral proteins mediate the binding of plasma membranes to F-actin affinity beads. 99:58.
— *See* Fowler, Luna, Hargreaves, Taylor, and Branton.
— *See* Goodloe-Holland and Luna.
— *See* Schwartz and Luna.
— *See* Strauch, Luna, and LaFountain.
— *See* Wuestehube and Luna.
Lunazzi, G. C. *See* de Bernard, Bianco, Bonucci, Costantini, Lunazzi, Martinuzzi, Modricky, Moro, Panfili, Pollesello, Stagni, and Vittur.
Lundell, D. J., Yamanaka, G., and Glazer, A. N. A terminal energy acceptor of the phycobilisome: the 75,000-dalton polypeptide of *Synechococcus* 6301 phycobilisomes–a new biliprotein. 91:315.
Lunstrum, G. P. *See* Keene, Sakai, Lunstrum, Morris, and Burgeson.
Lupu, F. *See* Simionescu, Lupu, and Simionescu.
Luskey, B. D. *See* Rubenstein, Fine, Luskey, and Rothman.
Luskey, K. L. *See* Jingami, Brown, Goldstein, Anderson, and Luskey.
— *See* Pathak, Luskey, and Anderson.
Lustyik, G. *See* Zs-Nagy, Lustyik, Zs-Nagy, Zarandi, and Bertoni-Freddari.
Luther, P. W., and Peng, H. B. Membrane-related specializations associated with acetylcholine receptor aggregates induced by electric fields. 100:235.
Lutz, Y. *See* Mähl, Lutz, Puvion, and Fuchs.
Lux, S. E. *See* Spiegel, Beardsley, Southwick, and Lux.
Luzio, J. P. *See* Mullock, Branch, van Schaik, Gilbert, and Luzio.
Lyall, R. M. *See* Terranova, DiFlorio, Lyall, Hic, Friesel, and Maciag.
Lyles, J. M., Linnemann, D., and Bock, E. Biosynthesis of the D2-cell adhesion molecule: posttranslation modifications, intracellular transport, and developmental changes. 99:2082.
—, Norrild, B., and Bock E. Biosynthesis of the D2-cell adhesion molecule: pulse-chase studies in cultured fetal rat neuronal cells. 98:2077.
— *See* Nybroe, Albrechtsen, Dahlin, Linneman, Lyles, Møller, and Bock.
Lynch, G. *See* Bennett and Lynch.
Lynch, M. H., O'Guin, W. M., Hardy, C., Mak, L., and Sun, T.-T. Acidic and basic hair/nail ("hard") keratins: their colocalization in upper cortical and cuticle cells of the human hair follicle and their relationship to "soft" keratins. 103:2593.
Lynch, W. *See* Bretscher and Lynch.
Lyon, J. A. *See* Howard, Lyon, Uni, Saul, Aley, Klotz, Panton, Sherwood, Marsh, Aikawa, and Rock.
Lyon, M. K., and Miller, K. R. Crystallization of the light-harvesting chlorophyll a/b complex within thylakoid membranes. 100:1139.
—, and Unwin, P. N. T. Two-dimensional structure of the light-harvesting chlorophyll a/b complex by cryoelectron microscopy. 106:1515.
Lyons, J. E. *See* Goodenough, Dick, and Lyons.
Lyons, R. M., Keski-Oja, J., and Moses, H. L. Proteolytic activation of latent transforming growth factor-β from fibroblast-conditioned medium. 106:1659.
Lyser, K. M. *See* Joseph-Silverstein, Consigli, Lyser, and Ver Pault.
Lytton, N. A. *See* Cumming, Burgoyne, and Lytton.
Lyubkin, A. K. *See* Rubin, Lyubkin, and Pressman.

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Ma, A. *See* Hubbard and Ma.
— *See* Hubbard, Wall, and Ma.
Ma, A. S.-P., and Sun, T.-T. Differentiation-dependent changes in the solubility of a 195-kD protein in human epidermal keratinocytes. 103:41.
Maack, D. J. *See* Casella, Craig, Maack, and Brown.
Mabuchi, I. An actin-depolymerizing protein (depactin) from starfish oocytes: properties and interaction with actin. 97:1612.
—, Hamaguchi, Y., Kobayashi, T., Hosoya, H., Tsukita, S., and Tsukita, S. Alpha-actinin from sea urchin eggs: biochemical properties, interaction with actin, and distribution in the cell during fertilization and cleavage. 100:384.
— *See* Hosoya and Mabuchi.
— *See* Kiehart, Mabuchi, and Inoué.
McAbee, D. D., and Grinnell, F. Fibronectin-mediated binding and phagocytosis of polystyrene latex beads by baby hamster kidney cells. 97:1515.
Macara, I. C. *See* English, Macara, and Cantley.
McBeath, E., and Fujiwara, K. Improved fixation for immunofluorescence microscopy using light-activated 1,3,5-triazido-2,4,6-trinitrobenzene (TTB). 99:2061.
MacBride, R. G., and Przybylski, R. J. Purified lectin from skeletal muscle inhibits myotube formation in vitro. 85:617.
McBurney, M. W. *See* Jones-Villeneuve, McBurney, Rogers, and Kalnins.
McCaffrey, T. A., Falcone, D. J., Brayton, C. F., Agarwal, L. A., Welt, F. G. P., and Weksler, B. B. Transforming growth factor-β activity is potentiated by heparin via dissociation of the transforming growth factor-β/α_2 macroglobulin inactive complex. 109:441.
McCarthy, J. B., and Furcht, L. T. Laminin and fibronectin promote the haptotactic migration of B16 mouse melanoma cells in vitro. 98:1474.
—, Hagen, S. T., and Furcht, L. T. Human fibronectin contains distinct adhesion- and motility-promoting domains for metastatic melanoma cells. 102:179.
—, Palm, S. L., and Furcht, L. T. Migration by haptotaxis of Schwann cell tumor line to the basement membrane glycoprotein laminin. 97:772.
— *See* Donaldson, Mahan, Hasty, McCarthy, and Furcht.
— *See* Herbst, McCarthy, Tsilibary, and Furcht.
— *See* Rogers, Letourneau, Peterson, Furcht, and McCarthy.
McCarthy, K. D., and de Vellis, J. Preparation of separate astroglial and oligodendroglial cell cultures from rat cerebral tissue. 85:890.
McCarthy, K. J., Accavitti, M. A., and Couchman, J. R. Immunological characterization of a basement membrane–specific chondroitin sulfate proteoglycan. 109:3187.
McCarthy, M. P. *See* Mitra, McCarthy, and Stroud.
McClain, T. D. *See* Gehron Robey, Young, Fisher, and McClain.
McClay, D. R. *See* Alliegro, Ettensohn, Burdsal, Erickson, and McClay.
— *See* Lotz, Burdsal, Erickson, and McClay.
McClellan, G. *See* Somlyo, Gonzalez-Serratos, Shuman, McClellan, and Somlyo.
McClelland, A. *See* Miskimins, McClelland, Roberts, and Ruddle.
McCloskey, M. A., Liu, Z.-Y., and Poo, M.-M. Lateral electromigration and diffusion of Fcε receptors on rat basophilic leukemia cells: effects of IgE binding. 99:778.
—, and Poo, M-m. Contact-induced redistribution of specific membrane components: local accumulation and development of adhesion. 102:2185.
—, and Poo, M.-m. Rates of membrane-associated reactions: reduction of dimensionality revisited. 102:88.
McClure, D. B. *See* Wolfe, Sato, and McClure.
McConlogue, L. C., Marton, L. J., and Coffino, P. Growth regulatory effects of cyclic AMP and polyamine depletion are dissociable in cultured mouse lymphoma cells. 96:762.
McConnell, H. M. *See* Hafeman, Smith, Fearon, and McConnell.
— *See* Howard, Petty, and McConnell.
— *See* Petty, Hafeman, and McConnell.
McConnell, J. *See* Fleming, McConnell, Johnson, and Stevenson.
McConnell, M., Whalen, A. M., Smith, D. E., and Fisher, P. A. Heat

shock–induced changes in the structural stability of proteinaceous karyoskeletal elements in vitro and morphologic effect in situ. 105:1087.
McCormick, F. *See* Bar-Sagi, Suhan, McCormick, and Feramisco.
McCormick, K. A. *See* Neubauer, Chung, McCormick, Taguchi, Thompson, and Cunha.
McCoy, K., Gal, S., Schwartz, R. H., and Gottesman, M. M. An acid protease secreted by transformed cells interferes with antigen processing. 106:1879.
McCrea, M. A. *See* Drummond, McCrea, and Colman.
McCue, P. A., Gubler, M. L., Sherman, M. I., and Cohen, B. N. Sodium butyrate induces histone hyperacetylation and differentiation of murine embryonal carcinoma cells. 98:602.
McCurdy, D. W., and Pratt, L. H. Immunogold electron microscopy of phytochrome in *Avena*: identification of intracellular sites responsible for phytochrome sequestering and enhanced pellet-ability. 103:2541.
McCutchen, C. *See* Landreth, Williams, and McCutchen.
McDaniel, M. L. *See* Kaplan, Colca, and McDaniel.
McDonagh, J. *See* Erickson, Carrell, and McDonagh.
McDonald, D. M. *See* LaVail, Sugino, and McDonald.
McDonald, J. A., and Kelley, D. G. Specific binding of fibronectin-antifibronectin immune complexes to procollagen: a new pitfall in immunostaining. 98:1042.
—, Kelley, D. G., and Broekelmann, T. J. Role of fibronectin in collagen deposition: Fab' to the gelatin-binding domain of fibronectin inhibits both fibronectin and collagen organization in fibroblast extracellular matrix. 92:485.
— *See* Roman, LaChance, Broekelmann, Kennedy, Wayner, Carter, and McDonald.
— *See* Villiger, Kelley, Engleman, Kuhn, and McDonald.
— *See* Wayner, Garcia-Pardo, Humphries, McDonald, and Carter.
MacDonald, J. R. *See* Clawson, MacDonald, and Woo.
McDonald, K. *See* Cande and McDonald.
— *See* Cande, McDonald, and Meeusen.
McDonald, K. L. *See* Masuda, McDonald, and Cande.
— *See* Wordeman, McDonald, and Cande.
McDonald, R. A., and Gelehrter, T. D. Glucocorticoid regulation of amino acid transport in anucleate rat hepatoma (HTC) cells. 88:536.
MacDonald, R. J. *See* Van Nest, MacDonald, Raman, and Rutter.
Macdonald-Bravo, H. *See* Bravo and Macdonald-Bravo.
McDonnel, A., and Staehelin, L. A. Adhesion between liposomes mediated by the chlorophyll a/b light-havesting complex isolated from chloroplast membranes. 84:40.
McElwee, S. *See* Knudsen, Smith, and McElwee.
McEver, R. P. *See* Isenberg, McEver, Phillips, Shuman, and Bainton.
— *See* Stenberg, McEver, Shuman, Jacques, and Bainton.
McEwen, B. F., and Arion, W. J. Permeabilization of rat hepatocytes with *Staphylococcus aureus* α-toxin. 100:1922.
McFadden, G. I., Schulze, D., Surek, B., Salisbury, J. L., and Melkonian, M. Basal body reorientation mediated by a Ca^{2+}-modulated contractile protein. 105:903.
McGarry, T., Hough, R., Rogers, S., and Rechsteiner, M. Intracellular distribution and degradation of immunoglobulin G and immunoglobulin G fragments injected into HeLa cells. 96:338.
McGary, C. T. *See* Fuller, Otto, Woloski, McGary, and Adams.
MacGlashan, D., Jr. Single-cell analysis of Ca^{++} changes in human lung mast cells: graded vs. all-or-nothing elevations after IgE-mediated stimulation. 109:123.
MacGlashan, D. W., Jr. *See* Dvorak, Hammel, Schulman, Peters, MacGlashan, Schleimer, Newball, Pyne, Dvorak, Lichtenstein, and Galli.
McGookey, D. J., and Anderson, R. G. W. Morphological characterization of the cholesteryl ester cycle in cultured mouse macrophage foam cells. 97:1156.
—, Fagerberg, K., and Anderson, R. G. W. Filipincholesterol complexes form in uncoated vesicle membrane derived from coated vesicles during receptor-mediated endocytosis of low density lipoprotein. 96:1273.
McGraw, C. F., Somlyo, A. V., and Blaustein, M. P. Localization of calcium in presynaptic nerve terminals. An ultrastructural and electron microprobe analysis. 85:228.
McGraw, T. E., Dunn, K. W., and Maxfield, F. R. Phorbol ester treatment increases the exocytic rate of the transferrin receptor recycling pathway independent of Serine-24 phosphorylation. 106:1061.
—, Greenfield, L., and Maxfield, F. R. Functional expression of the human transferrin receptor cDNA in Chinese hamster ovary cells deficient in endogenous transferrin receptor. 105:207.
— *See* Dunn, McGraw, and Maxfield.
MacGregor, A. N. *See* Foley, MacGregor, Kusel, Garland, Downie, and Moore.
McGuffee, L. J., Hurwitz, L., Little, S. A., and Skipper, B. E. $A^{45}Ca$ autoradiographic and stereological study of freeze-dried smooth muscle of the guinea pig vas deferens. 90:201.
McGuire, J. *See* Halaban, Langdon, Birchall, Cuono, Baird, Scott, Moellmann, and McGuire.
— *See* Milston and McGuire.
Machamer, C. *See* Doms, Ruusala, Machamer, Helenius, Helenius, and Rose.
Machamer, C. E., and Rose, J. K. A specific transmembrane domain of a coronavirus E1 glycoprotein is required for its retention in the Golgi region. 105:1205.
— *See* Puddington, Machamer, and Rose.
Machlin, P. S. *See* Earnshaw, Sullivan, Machlin, Cooke, Kaiser, Pollard, Rothfield, and Cleveland.
Maciag, T., Hoover, G. A., Stemerman, M. B., and Weinstein, R. Serial propagation of human endothelial cells in vitro. 91:420.
—, Kadish, J., Wilkins, L., Stemerman, M. B., and Weinstein, R. Organizational behavior of human umbilical vein endothelial cells. 94:511.
— *See* Friesel, Komoriya, and Maciag.
— *See* Lemmon, Riley, Thomas, Hoover, Maciag, and Bradshaw.
— *See* Schreiber, Kenney, Kowalski, Thomas, Gimenez-Gallego, Rios-Candelore, Di Salvo, Barritault, Courty, Courtois, Moenner, Loret, Burgess, Mehlman, Friesel, Johnson, and Maciag.
— *See* Tarranova, DiFlorio, Lyall, Hic, Friesel, and Maciag.
McIlwain, D. L. *See* Sinicropi and McIlwain.
McInnes, C. *See* Curtis, Forrester, McInnes, and Lawrie.
McIntosh, A. T. *See* Painter, Whisenand, and McIntosh.
MacIntosh, J. R. *See* Saxton and MacIntosh.
McIntosh, J. R., and Euteneuer, U. Tubulin hooks as probes for microtubule polarity: an analysis of the method and an evaluation of data on microtubule polarity in the mitotic spindle. 98:525.
— *See* Euteneuer, Jackson, and McIntosh.
— *See* Euteneuer and McIntosh.
— *See* Goldstein, Laymon, and McIntosh.
— *See* Heidemann, Zieve, and McIntosh.
— *See* Izant, Weatherbee, and McIntosh.
— *See* Leslie, Saxton, Mitchison, Neighbors, Salmon, and McIntosh.
— *See* Mullins and McIntosh.
— *See* Neighbors, Williams, and McIntosh.
— *See* Olmsted, Stemple, Saxton, Neighbors, and McIntosh.
— *See* Salmon, Leslie, Saxton, Karow, and McIntosh.
— *See* Salmon, Saxton, Leslie, Karow, and McIntosh.
— *See* Saxton, Stemple, Leslie, Salmon, Zavortink, and McIntosh.
— *See* Vigers, Coue, and McIntosh.
— *See* Zieve, Heidemann, and McIntosh.
McIntosh, T. J. *See* Zampighi, Simon, Robertson, McIntosh, and Costello.
Mack, D., Kluxen, B., and Kruppa, J. Accessibility to proteases of the cytoplasmic G protein domain of vesicular stomatitis virus is increased during intracellular transport. 109:2057.
Mack, J. A. Amerongen, Mack, Wilson, and Neutra.
McKanna, J. A. *See* Chinkers, McKanna, and Cohen.
MacKay, S. A. *See* Dinauer, MacKay, and Devreotes.
McKee, P. A. *See* Ohmori, Fretto, Harrison, Switzer, Erickson, and McKee.
McKee, W. G. *See* Futrelle, Traut, and McKee.
McKeel, M. *See* Salmon, McKeel, and Hays.
McKeithan, T. W., Lefebvre, P. A., Silflow, C. D., and Rosenbaum, J. L. Multiple forms of tubulin in *Polytomella* and *Chlamydomonas*: evidence for a precursor of flagellar α-tubulin. 96:1056.
—, and Rosenbaum, J. L. Multiple forms of tubulin in the cytoskeletal and flagellar microtubules of *Polytomella*. 91:352.
McKenna, M. P. *See* McNeil, McKenna, and Taylor.
McKenna, N. *See* Johnson, McKenna, and Wang.
McKenna, N. M., Johnson, C. S., and Wang, Y.-L. Formation and alignment of Z lines in living chick myotubes microinjected with rhodamine-labeled alpha-actinin. 103:2163.
—, Meigs, J. B., and Wang, Y. Identical distribution of fluorescently labeled brain and muscle actins in living cardiac fibroblasts and myocytes. 100:292.
—, Meigs, J. B., and Wang, Y.-L. Exchangeability of alpha-actinin in living cardiac fibroblasts and muscle cells. 101:2223.
—, Wang, Y.-L., and Konkel, M. E. Formation and movement of myosin-containing structures in living fibroblasts. 109:1163.
Mackensen, S. *See* Rojkind, Gatmaitan, Mackensen, Giambrone, Ponce, and Reid.
McKeown-Longo, P. J., and Etzler, C. A. Induction of fibronectin matrix assembly in human fibrosarcoma cells by dexamethasone. 104:601.
—, Hanning, R., and Mosher, D. F. Binding and degradation of platelet thrombospondin by cultured fibroblasts. 98:22.
—, and Mosher, D. F. Binding of plasma fibronectin to cell layers of human skin fibroblasts. 97:466.
—, and Mosher, D. F. Interaction of the 70,000-mol-wt amino-terminal fragment of fibronectin with the matrix-assembly receptor of fibroblasts.

100:364.
McKhann, G. M. *See* Tennekoon, Yoshino, Peden, Bigbee, Rutkowski, Kishimoto, DeVries, and McKhann.
Mackie, E. J., Halfter, W., and Liverani, D. Induction of tenascin in healing wounds. 107:2759.
—, Thesleff, I., and Chiquet-Ehrismann, R. Tenascin is associated with chondrogenic and osteogenic differentiation in vivo and promotes chondrogenesis in vitro. 105:2569.
Mackie, J. B. *See* Tucker, Mathews, Hendry, Mackie, and Roche.
Mackinnon, L. A. T. *See* Epstein, Ortiz, and Mackinnon.
Macknight, D. C. *See* Mills, Macknight, Jarrell, Dayer, and Ausiello.
McKnight, S. L. *See* Tufaro, Snider, and McKnight.
McLaughlin, B. J. *See* Cooper, McLaughlin, Tallant, and Cheung.
MacLean-Fletcher, S. D., and Pollard, T. D. Viscometric analysis of the gelation of *Acanthamoeba* extracts and purification of two gelation factors. 85:414.
MacLeish, P. R. *See* Townes-Anderson, MacLeish, and Raviola.
MacLennan, D. H. *See* Jorgensen, Shen, Campbell, and MacLennan.
— *See* Jorgensen, Shen, Daly, and MacLennan.
— *See* Jorgensen, Shen, MacLennan, and Tokuyasu.
MacLeod, J. *See* Lieberman, Wasco, MacLeod, Satir, and Orr.
McMahan, U. J., Slater, C. R., and Marshall, R. M. The influence of basal lamina on the accumulation of acetylcholine receptors at synaptic sites in regenerating muscle. 98:1453.
— *See* Anglister and McMahan.
— *See* Connor and McMahan.
— *See* Godfrey, Nitkin, Wallace, Rubin, and McMahan.
— *See* Magill-Solc and McMahan.
— *See* Nitkin, Smith, Magill, Fallon, Yao, Wallace, and McMahan.
— *See* Reist, Magill, and McMahan.
McManaman, J. *See* Smith, McManaman, and Appel.
McManaman, J. L. *See* Bursztajn, Berman, McManaman, and Watson.
— *See* Bursztajn, McManaman, and Appel.
McManus, L. *See* Luduena, Fellous, Francon, Nunez, and McManus.
McManus, L. M. *See* Ibbotson, Roodman, McManus, and Mundy.
McNeil, P. *See* Tanasugarn, McNeil, Reynolds, and Taylor.
McNeil, P. A., and Berns, M. W. Chromosome behavior after laser microirradiation of a single kinetochore in mitotic PtK_2 cells. 88:543.
McNeil, P. L., McKenna, M. P., and Taylor, D. L. A transient rise in cytosolic calcium follows stimulation of quiescent cells with growth factors and is inhibitable with phorbol myristate acetate. 101:372.
—, Murphy, R. F., Lanni, F., and Taylor, D. L. A method for incorporating macromolecules into adherent cells. 98:1556.
—, Muthukrishnan, L., Warder, E., and D'Amore, P. A. Growth factors are released by mechanically wounded endothelial cells. 109:811.
—, Swanson, J. A., Wright, S. D., Silverstein, S. C., and Taylor, D. L. Fc-receptor-mediated phagocytosis occurs in macrophages without an increase in average $[Ca^{++}]_i$. 102:1586.
—, Tanasugarn, L., Meigs, J. B., and Taylor, D. L. Acidification of phagosomes is initiated before lysosomal enzyme activity is detected. 97:692.
— *See* Hohman, McNeil, and Muscatine.
McNiven, M. A., and Porter, K. R. Microtubule polarity confers direction to pigment transport in chromatophores. 103:1547.
—, and Porter, K. R. Organization of microtubules in centrosome-free cytoplasm. 106:1593.
—, and Ward, J. B. Calcium regulation of pigment transport in vitro. 106:111.
McPherson, M. A., and Ramachandran, J. Inhibition of DNA synthesis in adrenocortical cells by cytochalasin B. 86:129.
McPherson, J. *See* Oohira, Wight, McPherson, and Bornstein.
McVey, J. H. *See* Holland, Harper, McVey, and Hogan.
McVey Ward, D. *See* Kaplan, McVey Ward, and Wiley.
Madara, J. L. Increases in Guinea pig small intestinal transepithelial resistance induced by osmotic loads are accompanied by rapid alterations in absorptive-cell tight-junction structure. 97:125.
—, Barenberg, D., and Carlson, S. Effects of cytochalasin D on occluding junctions of intestinal absorptive cells: further evidence that the cytoskeleton may influence paracellular permeability and junctional charge selectivity. 102:2125.
—, and Dharmsathaphorn, K. Occluding junction structure-function relationships in a cultured epithelial monolayer. 101:2124.
Madaras, J. *See* Mecham, Lange, Madaras, and Starcher.
Madaras, J. G. *See* Mecham, Griffin, Madaras, and Senior.
— *See* Mecham, Madaras, and Senior.
Madeddu, L. *See* Lowe, Madeddu, and Kelly.
— *See* Valtorta, Madeddu, Meldolesi, and Ceccarelli.
Madelian, V. *See* Shain, Forman, Madelian, and Turner.
Madison, L. D. *See* Rosenzweig, Madison, and Jamieson.
Mador, N. *See* Hochman, Levy, Mador, Gottesman, Shearer, and Okon.
— *See* Hochman, Mador, and Panet.
Madore, S. *See* Wieben, Madore, and Pederson.
Madore, S. J., Wieben, E. D., Kunkel, G. R., and Pederson, T. Precursors of U4 small nuclear RNA. 99:1140.
—, Wieben, E. D., and Pederson, T. Intracellular site of U1 small nuclear RNA processing and ribonucleoprotein assembly. 98:188.
Madreperla, S. A., Edidin, M., and Adler, R. Na^+, K^+-Adenosine triphosphatase polarity in retinal photoreceptors: a role for cytoskeletal attachments. 109:1483.
Madri, J. A., Pratt, B. M., and Tucker, A. M. Phenotypic modulation of endothelial cells by transforming growth factor-β depends upon the composition and organization of the extracellular matrix. 106:1375.
—, Roll, F. J., Furthmayr, H., and Foidart, J.-M. Ultrastructural localization of fibronectin and laminin in the basement membranes of the murine kidney. 86:682.
—, and Williams, S. K. Capillary endothelial cell cultures: phenotypic modulation by matrix components. 97:153.
— *See* Roll, Madri, Albert, and Furthmayr.
— *See* Stenn, Madri, Tinghitella, and Terranova.
— *See* Yannariello-Brown, Wewer, Liotta, and Madri.
Madsen, O. *See* Orci, Ravazzola, Amherdt, Madsen, Perrelet, Vassalli, and Anderson.
Madsen, O. D., Larsson, L.-I., Rehfeld, J. F., Schwartz, T. W., Lernmark, A., Labrecque, A. D., and Steiner, D. F. Cloned cell lines from a transplantable islet cell tumor are heterogeneous and express cholecystokinin in addition to islet hormones. 103:2025.
Madsen, P., Nielsen, S., and Celis, J. E. Monoclonal antibody specific for human nuclear proteins IEF 8Z30 and 8Z31 accumulates in the nucleus a few hours after cytoplasmic microinjection of cells expressing these proteins. 103:2083.
Madshus, I. H., Olsnes, S., and Sandvig, K. Mechanism of entry into the cytosol of poliovirus type 1: requirement for low pH. 98:1194.
Maeda, M., and Thompson, G. A., Jr. On the mechanism of rapid plasma membrane and chloroplast envelope expansion in *Dunaliella salina* exposed to hypoosmotic shock. 102:289.
— *See* Einspahr, Maeda, and Thompson.
Maeder, J. *See* Matus, Pehling, Ackermann, and Maeder.
Maelicke, A. *See* Lang, Mazauric-Stüker, and Maelicke.
Maeno, M. *See* Wrana, Maeno, Hawrylyshyn, Yao, Domenicucci, and Sodek.
Magee, A. I. *See* Penn, Burdett, Hobson, Magee, and Rees.
— *See* Penn, Hobson, Rees, and Magee.
Magendantz, M. *See* Kim, Magendantz, Katz, and Solomon.
— *See* Solomon and Magendantz.
Magill, C. *See* Nitkin, Smith, Magill, Fallon, Yao, Wallace, and McMahan.
— *See* Reist, Magill, and McMahan.
Magill-Solc, C., and McMahan, U. J. Motor neurons contain agrin-like molecules. 107:1825.
Magnani, J. L. *See* Rougon, Dubois, Buckley, Magnani, and Zollinger.
Magnuson, N. S. *See* Disney, Johnson, Magnuson, Sylvester, and Reeves.
Magrath, R. *See* Warn, Magrath, and Webb.
Mahaffey, D. T., Moore, M. S., Brodsky, F. M., and Anderson, R. G. W. Coat proteins isolated from clathrin coated vesicles can assemble into coated pits. 108:1615.
Mahan, J. T. *See* Donaldson, Mahan, Hasty, McCarthy, and Furcht.
Maher, P. A., Cox, G. F., and Singer, S. J. Zeugmatin: a new high molecular weight protein associated with Z lines in adult and early embryonic striated muscle. 101:1871.
—, and Pasquale, E. B. Heat shock induces protein tyrosine phosphorylation in cultured cells. 108:2029.
—, and Pasquale, E. B. Tyrosine phosphorylated proteins in different tissues during chick embryo development. 106:1747.
— *See* Keller, Scallen, Clarke, Maher, Krisans, and Singer.
— *See* Tokuyasu and Maher.
— *See* Tokuyasu, Maher, and Singer.
Mähl, P., Lutz, Y., Puvion, E., and Fuchs, J.-P. Rapid effect of heat shock on two heterogeneous nuclear ribonucleoprotein-associated antigens in HeLa cells. 109:1927.
Mahley, R. W. *See* Majack, Castle, Goodman, Weisgraber, Mahley, Shooter, and Gebicke-Haerter.
— *See* Pitas, Boyles, Mahley, and Bissell.
Mahon, K. A. *See* Epstein, Mahon, and Gall.
Mahowald, A. P. *See* Brennan, Warren, and Mahowald.
— *See* DiMario and Mahowald.
Maier, J. A. M. *See* Presta, Maier, and Ragnotti.
Maihle, N. J., Dedman, J., Means, A., Chafouleas, J., and Satir, B H. Presence and indirect immunofluorescent localization of calmodulin in *Paramecium tetraurelia*. 89:695.
Mains, R. E., and Eipper, B. A. Coordinate, equimolar secretion of smaller peptide products derived from pro-ACTH/endorphin by mouse pituitary tumor cells. 89:21.

Maisel, H. *See* Aster, Brewer, and Maisel.
— *See* Hatfield, Skoff, Maisel, and Eng.
Majack, R. A. Beta-type transforming growth factor specifies organizational behavior in vascular smooth muscle cell cultures. 105:465.
Majack, R. A., and Bornstein, P. Heparin and related glycosaminoglycans modulate the secretory phenotype of vascular smooth muscle cells. 99:1688.
—, **and Bornstein, P.** Heparin regulates the collagen phenotype of vascular smooth muscle cells: induced synthesis of an M_r 60,000 collagen. 100:613.
—, **Castle, C. K., Goodman, L. V., Weisgraber, K. H., Mahley, R. W., Shooter, E. M., and Gebicke-Haerter, P. J.** Expression of apolipoprotein E by cultured vascular smooth muscle cells is controlled by growth state. 107:1207.
—, **Cook, S. C., and Bornstein P.** Platelet-derived growth factor and heparin-like glycosaminoglycans regulate thrombospondin synthesis and deposition in the matrix by smooth muscle cells. 101:1059.
—, **Goodman, L. V., and Dixit, V. M.** Cell surface thrombospondin is functionally essential for vascular smooth muscle cell proliferation. 106:415.
Majerus, P. W. *See* Maruyama, Bell, and Majerus.
— *See* Neufeld, Majerus, Krueger, and Saffitz.
Mak, L. *See* Lynch, O'Guin, Hardy, Mak, and Sun.
Makarow, M., and Nevalainen, L. T. Transport of a fluorescent macromolecule via endosomes to the vacuole in *Saccharomyces cerevisiae*. 104:67.
Makman, M. H. *See* Nagata, Rosen, Makman, and Bloom.
Malawista, S. E., and De Boisfleury Chevance, A. The cytokineplast: purified, stable, and functional motile machinery from human blood polymorphonuclear leukocytes. Possible formative role of heat-induced centrosomal dysfunction. 95:960.
Malchow, D. *See* Bumann, Wurster, and Malchow.
Maldonado, M. *See* Brandan, Maldonado, Garrido, and Inestrosa.
Male, P. *See* Marsh, Schmid, Kern, Harms, Male, Mellman, and Helenius.
Malehorn, D. E. *See* Bankaitis, Malehorn, Emr, and Greene.
Malek-Hedayat, S. *See* Ho, Malek-Hedayat, Wang, and Schindler.
Malgaroli, A., Milani, D., Meldolesi, J., and Pozzan, T. Fura-2 measurement of cytosolic free Ca^{2+} in monolayers and suspensions of various types of animal cells. 105:2145.
Mali, P., Sandberg, M., Vuorio, E., Yelick, P. C., Hecht, N. B., and Parvinen, M. Localization of protamine 1 mRNA in different stages of the cycle of the rat seminiferous epithelium. 107:407.
— *See* Krawczyk, Mali, and Parvinen.
Malinoff, H. L., and Wicha, M. S. Isolation of a cell-surface receptor protein for laminin from murine fibrosarcoma cells. 96:1475.
Maller, J. L. *See* Lohka and Maller.
Malnoë, P., Mayfield, S. P., and Rochaix, J.-D. Comparative analysis of the biogenesis of photosystem II in the wild-type and Y-1 mutant of *Chlamydomonas reinhardtii*. 106:609.
Malone, J. D., Teitelbaum, S. L., Griffin, G. L., Senior, R. M., and Kahn, A. J. Recruitment of osteoclast precursors by purified bone matrix constituents. 92:227.
Mamajiwalla, S. *See* Burgess, Jiang, Mamajiwalla, and Kinsey.
Manabe, M. *See* O'Guin, Manabe, and T.-T. Sun.
Manabe, R. *See* Nishida, Nakagawa, Awata, Ohashi, Watanabe, and Manabe.
Manaranche, R., Thieffry, M., and Israel, M. Effect of the venom of *Glycera convoluta* on the spontaneous quantal release of transmitter. 85:446.
— *See* Morel, Manaranche, Israël, and Gulik-Krzywicki.
— *See* Morel, Marsal, Manaranche, Lazereg, Mazie, and Israel.
— *See* Morel, Thieffry, and Manaranche.
Mandelkow, E. *See* Hagstedt, Lichtenberg, Wille, Mandelkow, and Mandelkow.
— *See* Mandelkow, Schultheiss, Rapp, Müller, and Mandelkow.
Mandelkow, E.-M., Schultheiss, R., Rapp, R., Müller, M., and Mandelkow, E. On the surface lattice of microtubules: helix starts, protofilament number, seam, and handedness. 102:1067.
— *See* Hagstedt, Lichtenberg, Wille, Mandelkow, and Mandelkow.
Manduca, P. *See* Descalzi Cancedda, Manduca, Tacchetti, Fossa, Quarto, and Cancedda.
Manenti, S. *See* Dunia, Manenti, Rousselet, and Benedetti.
Manfredi, J. J., Parness, J., and Horwitz, S. B. Taxol binds to cellular microtubules. 94:688.
Mangeat, P. *See* Burridge, Kelly, and Mangeat.
— *See* Mercier, Reggio, Devilliers, Bataille, and Mangeat.
Mangeat, P. H., and Burridge, K. Immunoprecipitation of nonerythrocyte spectrin with live cells following microinjection of specific antibodies: relation to cytoskeletal structures. 98:1363.
Mangelsdorf, D. J., Koeffler, H. P., Donaldson, C. A., Pike, J. W., and Haussler, M. R. 1,25-Dihydroxyvitamin D_3-induced differentiation in a human promyelocytic leukemia cell line (HL-60): receptor-mediated maturation to macrophage-like cells. 98:391.
Maniara, G. *See* Vanderkooi, Maniara, and Erecinska.
Mann, A. S. *See* Morrow, Cianci, Ardito, Mann, and Kashgarian.
Mann, D. A. *See* Doherty, Mann, and Walsh.
Mannella, C. A. Structure of the outer mitochondrial membrane: ordered arrays of porelike subunits in outer membrane fractions from *Neurospora crassa* mitochondria. 94:680.
Manney, T. R., Jackson, P., and Meade, J. Two temperature-sensitive mutants of *Saccharomyces cerevisiae* with altered expression of mating-type functions. 96:1592.
Mannino, R. J., Ballmer, K., Zeltner, D., and Burger, M. M. An inhibitor of animal cell growth increases cell-to-cell adhesion. 91:855.
Mannucci, P. M. *See* Altieri, Bader, Mannucci, and Edgington.
Mano, T. *See* Chou, Mano, and Feldman.
Mant, G. R. *See* Bordas, Mant, Diakun, and Nave.
Manthorpe, M., Engvall, E., Ruoslahti, E., Longo, F. M., Davis, G. E., and Varon, S. Laminin promotes neuritic regeneration from cultured peripheral and central neurons. 97:1882.
— *See* Engvall, Davis, Dickerson, Ruoslahti, Varon, and Manthorpe.
— *See* Muir, Engvall, Varon, and Manthorpe.
Manuelidis, L., Langer-Safer, P. R., and Ward, D. C. High-resolution mapping of satellite DNA using biotin-labeled DNA probes. 95:619.
Manzi, R. M. *See* Godfrey, Manzi, Clark, and Hoffstein.
Mar, J., Lee, J. H., Shea, D., and Walsh, C. J. New poly(A)+RNAs appear coordinately during the differentiation of *Naegleria gruberi* amebae into flagellates. 102:353.
Mar, J. H., Antin, P. B., Cooper, T. A., and Ordahl, C. P. Analysis of the upstream regions governing expression of the chicken cardiac troponin T gene in embryonic cardiac and skeletal muscle cells. 107:573.
Maratos-Flier, E., Kao, C.-Y. Y., Verdin, E. M., and King, G. L. Receptor-mediated vectorial transcytosis of epidermal growth factor by Madin–Darby canine kidney cells. 105:1595.
Marazzi, G., Bard, F., Klymkowsky, M. W., and Rubin, L. L. Microinjection of a monoclonal antibody against a 37-kD protein (tropomyosin 2) prevents the formation of new acetylcholine receptor clusters. 109:2337.
— *See* Anthony, Jacobs-Cohen, Marazzi, and Rubin.
Marcantonio, E. *See* Harnik-Ort, Prakash, Marcantonio, Colman, Rosenfeld, Adesnik, Sabatini, and Kreibich.
Marcantonio, E. E., Amar-Costesec, A., and Kreibich, G. Segregation of the polypeptide translocation apparatus to regions of the endoplasmic reticulum containing ribophorins and ribosomes. II. Rat liver microsomal subfractions contain equimolar amounts of ribophorins and membrane-bound ribosomes. 99:2254.
—, **and Hynes, R. O.** Antibodies to the cytoplasmic domain of the integrin β_1 subunit react with proteins in vertebrates, invertebrates, and fungi. 106:1765.
— *See* Hynes, Marcantonio, Stepp, Urry, and Yee.
— *See* Rosenfeld, Marcantonio, Hakimi, Ort, Atkinson, Sabatini, and Kreibich.
— *See* Solowska, Guan, Marcantonio, Trevithick, Buck, and Hynes.
Marceau, N. *See* Baribault, Blouin, Bourgon, and Marceau.
— *See* Landry, Bernier, Ouellet, Goyette, and Marceau.
Marchand, C. M.-F. *See* Margolis, Marchand, Kistler, and LaVail.
Marchaterre, M. *See* Salpeter, Marchaterre, and Harris.
Marchese-Ragona, S. P., Wall, J. S., and Johnson, K. A. Structure and mass analysis of 14S dynein obtained from *Tetrahymena* cilia. 106:127.
Marchesi, V. *See* Sabban, Marchesi, Adesnik, and Sabatini.
Marchesi, V. T. *See* Georgatos and Marchesi.
— *See* Georgatos, Weaver, and Marchesi.
— *See* Morrow and Marchesi.
Marchi, F., and Leblond, C. P. Radioautographic characterization of successive compartments along the rough endoplasmic reticulum–Golgi pathway of collagen precursors in foot pad fibroblasts of [^{3}H]proline-injected rats. 98:1705.
Marchisio, P. C., Cirillo, D., Naldini, L., Primavera, M. V., Teti, A., and Zambonin-Zallone, A. Cell-substratum interaction of cultured avian osteoclasts is mediated by specific adhesion structures. 99:1696.
— *See* Dejana, Colella, Conforti, Abbadini, Gaboli, and Marchisio.
— *See* Dejana, Colella, Languino, Balconi, Corbascio, and Marchisio.
— *See* Dejana, Lampugnani, Giorgi, Gaboli, Federici, Ruggeri, and Marchisio.
Marchuk, D. *See* Kim, Marchuk, and Fuchs.
Marcum, J. A. *See* Galli, Dvorak, Marcum, Ishizaka, Nabel, Der Simonian, Pyne, Goldin, Rosenberg, Cantor, and Dvorak.
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— *See* Wagner and Marder.
— *See* Wagner, Mayadas, and Marder.
— *See* Wagner, Mayadas, Urban-Pickering, Lewis, and Marder.
— *See* Wagner, Olmsted, and Marder.
Mareel, M. M. *See* Behrens, Mareel, Van Roy, and Birchmeier.
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Margolis, R. K. *See* Aquino, Margolis, and Margolis.
— *See* Giannattasio, Zanini, Rosa, Meldolesi, Margolis, and Margolis.
— *See* Ripellino, Bailo, Margolis, and Margolis.
— *See* Ripellino, Margolis, and Margolis.
— *See* Zanini, Giannattasio, Nussdorfer, Margolis, Margolis, and Medolesi.
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— *See* Komesli, Tournier, Paintrand, Margolis, Job, and Bornens.
— *See* Palmer, O'Day, Wener, Andrews, and Margolis.
— *See* Turner and Margolis.
Margolis, R. U. *See* Aquino, Margolis, and Margolis.
— *See* Giannattasio, Zanini, Rosa, Meldolesi, Margolis, and Margolis.
— *See* Ripellino, Bailo, Margolis, and Margolis.
— *See* Ripellino, Margolis, and Margolis.
— *See* Zanini, Giannattasio, Nussdorfer, Margolis, Margolis, and Meldolesi.
Margolis, T. P., Marchand, C. M.-F., Kistler, H. B., Jr., and LaVail, J. H. Uptake and anterograde axonal transport of wheat germ agglutinin from retina to optic tectum in the chick. 89:152.
Margreth, A. *See* Damiani, Margreth, Furlan, Dahms, Arnn, and Sabbadini.
Marguerie, G. *See* Duperray, Berthier, Chagnon, Ryckewaert, Ginsberg, Plow, and Marguerie.
— *See* Tranqui, Andrieux, Hudry-Clergeon, Ryckewaert, Soyez, Chapel, Ginsberg, Plow, and Marguerie.
Margulies, M. M. *See* Hoober, Marks, Keller, and Margulies.
Marin, F. T., and Rothman, F. G. Regulation of development in *Dictyostelium discoideum*. IV. Effects of ions on the rate of differentiation and cellular response to cyclic AMP. 87:823.
Markelonis, G. J., Oh, T. H., Park, L. P., Cha, C. Y., Sofia, C. A., Kim, J. W., and Azari, P. Synthesis of the transferrin receptor by cultures of embryonic chicken spinal neurons. 100:8.
Markham, A. *See* Boukamp, Petrussevska, Breitkreutz, Hornung, Markham, and Fusenig.
Marks, D. B. *See* Hoober, Marks, Keller, and Margulies.
Markwald, R. R. *See* Funderburg and Markwald.
Marnell, M. H., Mathis, L. S., Stookey, M., Shia, S.-P., Stone, D. K., and Draper, R. K. A Chinese hamster ovary cell mutant with a heat-sensitive, conditional-lethal defect in vacuolar function. 99:1907.
—, Stookey, M., and Draper, R. K. Monensin blocks the transport of diphtheria toxin to the cell cytoplasm. 93:57.
Maro, B., Howlett, S. K., and Webb, M. Non-spindle microtubule organizing centers in metaphase II–arrested mouse oocytes. 101:1665.
— *See* Goodall and Maro.
— *See* Houliston and Maro.
— *See* Houliston, Pickering, and Maro.
— *See* Tassin, Maro, and Bornens.
Marotta, C. A. *See* Brown, Nixon, and Marotta.
— *See* Nixon, Brown, and Marotta.
Maroulakou, I. *See* Georgatos, Maroulakou, and Blobel.
Maroux, S. *See* Gorvel, Mishal, Liegey, Rigal, and Maroux.
Marsal, J. *See* Morel, Marsal, Manaranche, Lazereg, Mazie, and Israel.
Marsh, K. *See* Howard, Lyon, Uni, Saul, Aley, Klotz, Panton, Sherwood, Marsh, Aikawa, and Rock.
Marsh, L., and Letourneau, P. C. Growth of neurites without filopodial or lamellipodial activity in the presence of cytochalasin B. 99:2041.
Marsh, M., Bolzau, E., White, J., and Helenius, A. Interaction of Semliki Forest virus spike glycoprotein rosettes and vesicles with cultured cells. 96:455.
—, Schmid, S., Kern, H., Harms, E., Male, P., Mellman, I., and Helenius, A. Rapid analytical and preparative isolation of functional endosomes by free flow electrophoresis. 104:875.
— *See* Griffiths, Back, and Marsh.
— *See* Lewis, Green, Marsh, Vihko, Helenius, and Mellman.
Marsh, M. L. *See* Becker, Kermode, Naccache, Yassin, Marsh, Munoz, and Sha'afi.
Marshall, J. L. *See* Robbins, Peng, and Marshall.
Marshall, L. M., Thureson-Klein, Å, and Hunt, R. C. Exclusion of erythrocyte-specific membrane proteins from clathrin-coated pits during differentiation of human erythroleukemic cells. 98:2055.
Marshall, R. M. *See* McMahan, Slater, and Marshall.
Marshall, S. *See* Halaban, Pomerantz, Marshall, Lambert, and Lerner.
Marshallsay, B. *See* Pon, Moll, Vestweber, Marshallsay, and Schatz.
Martin, D. P., Schmidt, R. E., DiStefano, P. S., Lowry, O. H., Carter, J. G., and Johnson, E. M., Jr. Inhibitors of protein synthesis and RNA synthesis prevent neuronal death caused by nerve growth factor deprivation. 106:829.
Martin, G. R. *See* Albini, Allavena, Melchiori, Giancotti, Richter, Comoglio, Parodi, Martin, and Tarone.
— *See* Grabel, Singer, Martin, and Rosen.
— *See* Hayman, Oldberg, Martin, and Ruoslahti.
— *See* Jerdan, Varner, Greenberg, Horn, and Martin.
— *See* Kleinman, Klebe, and Martin.
— *See* Kubota, Kleinman, Martin, and Lawley.
— *See* Laurie, Leblond, and Martin.
— *See* Seppä, Grotendorst, Seppä, Schiffmann, and Martin.
Martin, G. S. *See* Carter, Howlett, Martin, and Bissell.
— *See* Radke, Carter, Moss, Dehazya, Schliwa, and Martin.
Martin, N. C. *See* Li, Hopper, and Martin.
Martin, O. C. *See* Pagano, Longmuir, Martin, and Struck.
— *See* Pagano, Sepanski, and Martin.
Martin, T. E., Barghusen, S. C., Leser, G. P., and Spear, P. G. Redistribution of nuclear ribonucleoprotein antigens during herpes simplex virus infection. 105:2069.
— *See* Fakan, Leser, and Martin.
— *See* Jones, Okamura, and Martin.
— *See* Leser and Martin.
— *See* Minoo, Sullivan, Solomon, Martin, Toft, and Scott.
— *See* Pullman and Martin.
Martinez-Hernandez, A., Gay, S., and Miller, E. J. Ultrastructural localization of type V collagen in rat kidney. 92:343.
— *See* Amenta, Clark, and Martinez-Hernandez.
— *See* Clark, Crossland, Kaplan, and Martinez-Hernandez.
Martinez-Palomo, A., Meza, I., Beaty, G., and Cereijido, M. Experimental modulation of occluding junctions in a cultured transporting epithelium. 87:736.
— *See* Meza, Ibarra, Sabanero, Martinez-Palomo, and Cereijido.
Martini, R., and Schachner, M. Immunoelectron microscopic localization of neural cell adhesion molecules (L1, N-CAM, and MAG) and their shared carbohydrate epitope and myelin basic protein in developing sciatic nerve. 103:2439.
—, and Schachner, M. Immunoelectron microscopic localization of neural cell adhesion molecules (L1, N-CAM, and myelin-associated glycoprotein) in regenerating adult mouse sciatic nerve. 106:1735.
Martin-Perez, J., Bar-Zvi, D., Branton, D., and Erikson, R. L. Transformation by Rous sarcoma virus induces clathrin heavy chain phosphorylation. 109:577.
Martins, T. J., Sugimoto, Y., and Erikson, R. L. Dissociation of inositol triphosphate from diacylglycerol production in Rous sarcoma virus–transformed fibroblasts. 108:683.
Martins de Sa, C. *See* Grossi de Sa, Martins de Sa, Harper, Olink-Coux, Huesca, and Scherrer.
Martinuzzi, A., Askanas, V., Kobayashi, T., Engel, W. K., and Di Mauro, S. Expression of muscle-gene–specific isozymes of phosphorylase and creatine kinase in innervated cultured human muscle. 103:1423.
Martinuzzi, P. *See* de Bernard, Bianco, Bonucci, Costantini, Lunazzi, Martinuzzi, Modricky, Moro, Panfili, Pollesello, Stagni, and Vittur.
Marton, L. J. *See* McConlogue, Marton, and Coffino.
Marton, L. S., and Stefansson, K. Developmental alterations in molecular weights of proteins in the human central nervous system that react with antibodies against myelin-associated glycoprotein. 99:1642.
Marty, F., and Branton, D. Analytical characterization of beetroot vacuole membrane. 87:72.
Martz, E. Immune T lymphocyte to tumor cell adhesion. Magnesium sufficient, calcium insufficient. 84:584.
Maruta, H., Greer, K., and Rosenbaum, J. L. The acetylation of alpha-tubulin and its relationship to the assembly and disassembly of microtubules. 103:571.
— *See* Greer, Maruta, L'Hernault, and Rosenbaum.
Maruyama, I., Bell, C. E., and Majerus, P. W. Thrombomodulin is found on endothelium of arteries, veins, capillaries, and lymphatics, and on syncytiotrophoblast of human placenta. 101:363.
Maruyama, K., Sawada, H., Kimura, S., Ohashi, K., Higuchi, H., and Umazume, Y. Connectin filaments in stretched skinned fibers of frog skeletal muscle. 99:1391.
—, Yoshioka, T., Higuchi, H., Ohashi, K., Kimura, S., and Natori, R. Connectin filaments link thick filaments and Z lines in frog skeletal muscle as revealed by immunoelectron microscopy. 101:2167.
Maruyama, K. *See* Horowits, Maruyama, and Podolsky.
— *See* Ohashi, Mikawa, and Maruyama.
Marxer, A., Stieger, B., Quaroni, A., Kashgarian, M., and Hauri, H.-P. $(Na^+ + K^+)$-ATPase and plasma membrane polarity of intestinal ep-

ithelial cells: presence of a brush border antigen in the distal large intestine that is immunologically related to β subunit. 109:1057.
— *See* Gorr, Stieger, Fransen, Kedinger, Marxer, and Hauri.
— *See* Hauri, Sterchi, Bienz, Fransen, and Marxer.
Marzella, L., Ahlberg, J., and Glaumann, H. Isolation of autophagic vacuoles from rat liver: morphological and biochemical characterization. 93:144.
Marzluff, W. F. *See* Nash, Kozak, Angerer, Angerer, Schatten, Schatten, and Marzluff.
Masaki, R., Yamamoto, A., and Tashiro, Y. Cytochrome P-450 and NADPH-cytochrome P-450 reductase are degraded in the autolysosomes in rat liver. 104:1207.
— *See* Yamamoto, Masaki, and Tashiro.
Masaki, T. *See* Bader, Masaki, and Fischman.
— *See* Endo and Masaki.
— *See* Kanai, Takemura, Oshima, Mori, Ihara, Yanagisawa, Masaki, and Hirokawa.
— *See* Lin, Eshleman, Grund, Fischman, Masaki, Franke, and Holtzer.
— *See* Lin, Holtzer, Schultheiss, Murray, Masaki, Fischman, and Holtzer.
— *See* Reinach, Masaki, and Fischman.
— *See* Reinach, Masaki, Shafiq, Obinata, and Fischman.
— *See* Shimizu, Dennis, Masaki, and Fischman.
— *See* Takano-Ohmuro, Obinata, Kawashima, Masaki, and Tanaka.
Masakowski, V. R. *See* Pierce, Mustoe, Lingelbach, Masakowski, Griffin, Senior, and Deuel.
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Mascardo, R. N. *See* Sherline and Mascardo.
— *See* Weatherbee, Sherlin, Mascardo, Izant, Luftig, and Weihing.
Mason, C. A. *See* Hatten, Liem, and Mason.
Mason, H. S. *See* Klein, Mason, and Mullet.
Mason, P. W., Bigbee, J. W., and DeVries, G. H. Cerebellar granule cells contain a membrane mitogen for cultured Schwann cells. 108:607.
— *See* Yoshino, Mason, and DeVries.
Mason, R. J. *See* Sugahara, Caldwell, and Mason.
Massagué, J. Transforming growth factor-β modulates the high-affinity receptors for epidermal growth factor and transforming growth factor-α. 100:1508.
— *See* Andres, Stanley, Cheifetz, and Massagué.
Massoglia, S. *See* Gospodarowicz, Lepine, Massoglia, and Wood.
Masuda, A. *See* Goshima, Masuda, and Owaribe.
Masuda, H., McDonald, K. L., and Cande, W. Z. The mechanism of anaphase spindle elongation: uncoupling of tubulin incorporation and microtubules sliding during in vitro spindle reactivation. 107:623.
— *See* Owaribe and Masuda.
Masuda, R. *See* Matsuura, Masuda, Omori, Negishi, and Tashiro.
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Masui, T. *See* Wakefield, Smith, Masui, Harris, and Sporn.
Masui, Y. *See* Clarke and Masui.
— *See* Lohka and Masui.
Masukata, H. *See* Masumoto, Masukata, Muro, Nozaki, and Okazaki.
Masumoto, H., Masukata, H., Muro, Y., Nozaki, N., and Okazaki, T. A human centromere antigen (CENP-B) interacts with a short specific sequence in alphoid DNA, a human centromeric satellite. 109:1963.
Masure, H. R. *See* Stommel, Stephens, Masure, and Head.
Matagne, R. F., Michel-Wolvertz, M.-R., Munaut, C., Duyckaerts, C., and Sluse, F. Induction and characterization of mitochondrial DNA mutants in *Chlamydomonas reinhardtii*. 108:1221.
Mateo, N. *See* Falcone, Mateo, Shio, Minick, and Fowler.
Mather, I. H. *See* Greenwalt and Mather.
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Mathieu-Costello, O. *See* Griffiths, Warren, Quinn, Mathieu-Costello, and Hoppeler.
Mathis, L. S. *See* Marnell, Mathis, Stookey, Shia, Stone, and Draper.
Mathog, D. *See* Hochstrasser, Mathog, Gruenbaum, Saumweber, and Sedat.
Matlin, K., Bainton, D. F., Pesonen, M., Louvard, D., Genty, N., and Simons, K. Transepithelial transport of a viral membrane glycoprotein implanted into the apical plasma membrane of Madin-Darby canine kidney cells. I. Morphological evidence. 97:627.
— *See* Griffiths, Pfeiffer, Simons, and Matlin.
— *See* White, Matlin, and Helenius.
Matlin, K. S. The sorting of proteins to the plasma membrane in epithelial cells. 103:2565.
—, Reggio, H., Helenius, A., and Simons, K. Infectious entry pathway of influenza virus in a canine kidney cell line. 91:601.
—, and Simons, K. Sorting of an apical plasma membrane glycoprotein occurs before it reaches the cell surface in cultured epithelial cells. 99:2031.
— *See* Skibbens, Roth, and Matlin.
— *See* Zuk, Matlin, and Hay.
Matsuda, Y., Saito, T., Yamaguchi, T., Koseki, M., and Hayashi, K. Topography of cell wall lytic enzyme in *Chlamydomonas reinhardtii*: form and location of the stored enzyme in vegetative cell and gamete. 104:321.
Matsudaira, P. T., and Burgess, D. R. Organization of the cross-filaments in intestinal microvilli. 92:657.
—, and Burgess, D. R. Partial reconstruction of the microvillus core bundle: characterization of villin as a Ca^{++}-dependent, actin bundling/depolymerizing protein. 92:648.
Matsuhashi, S. *See* Hanai, Kato, Matsuhashi, Morita, Raines, and Ross.
Matsumoto, B. *See* Vaughan, Fisher, Bernstein, Hale, Linberg, and Matsumoto.
Matsumoto, G. *See* Kobayashi, Tsukita, Tsukita, Yamamoto, and Matsumoto.
— *See* Tsukita, Tsukita, Kobayashi, and Matsumoto.
— *See* Tsukita, Tsukita, and Matsumoto.
Matsumoto, K. *See* Uno, Matsumoto, Hirata, and Ishikawa.
Matsumoto, S. *See* Matsuzaki, Matsumoto, and Yahara.
Matsumura, F. *See* Lin, Matsumura, and Yamashiro-Matsumura.
— *See* Sugino and Matsumura.
— *See* Yamashiro-Matsumura and Matsumura.
Matsuuchi, L., Buckley, K. M., Lowe, A. W., and Kelly, R. B. Targeting of secretory vesicles to cytoplasmic domains in AtT-20 and PC-12 cells. 106:239.
— *See* Burgess, Craik, Matsuuchi, and Kelly.
Matsuura, S., Eto, S., Kato, K., and Tashiro, Y. Ferretin immunoelectron microscopic localization of 5′-nucleotidase on rat liver cell surface. 99:166.
—, Masuda, R., Omori, K., Negishi, M., and Tashiro, Y. Distribution and induction of cytochrome P-450 in rat liver nuclear envelope. 91:212.
—, Nakada, H., Sawamura, T., and Tashiro, Y. Distribution of an Asialoglyoprotein receptor on rat hepatocyte cell surface. 95:864.
— *See* Takemura, Omori, Tanaka, Omori, Matsuura, and Tashiro.
Matsuzaki, F., Matsumoto, S., and Yahara, I. Truncation of the carboxy-terminal domain of yeast β-tubulin causes temperature-sensitive growth and hypersensitivity to antimitotic drugs. 107:1427.
— *See* Sotoh, Iwane, Matsuzaki, Kikuchi, and Ikai.
Matt, H. *See* Bilinski, Plattner, and Matt.
Mattaj, I. W., Lienhard, S., Zeller, R., and DeRobertis, E. M. Nuclear exclusion of transcription factor IIIA and the 42S particle tRNA-binding protein in *Xenopus* oocytes: a possible mechanism for gene control? 97:1261.
— *See* Dreyfuss, Philipson, and Mattaj.
Mattei, J.-F. *See* Nguyen, Mattei, Mattei, Santoni, Goridis, and Jordan.
Mattei, M.-G. *See* Gennarini, Cibelli, Rougon, Mattei, and Goridis.
— *See* Nguyen, Mattei, Mattei, Santoni, Goridis, and Jordan.
Matteoni, R., and Kries, T. E. Translocation and clustering of endosomes and lyosomes depends on microtubules. 105:1253.
Matter, K. *See* Stieger, Matter, Baur, Bucher, Höchli, and Hauri.
Mattey, D. L. *See* Watt, Mattey, and Garrod.
Matthew, W. D., Tsavaler, L., and Reichardt, L. F. Identification of a synaptic vesicle-specific membrane protein with a wide distribution in neuronal and neurosecretory tissue. 91:257.
— *See* Chiu, Matthew, and Patterson.
Matthieu, J.-M., Roch, J.-M., Omlin, F. X., Rambaldi, I., Almazan, G., and Braun, P. E. Myelin instability and oligodendrocyte metabolism in myelin-deficient mutant mice. 103:2673.
Mattson, D. M. *See* Adair, Steinmetz, Mattson, Goodenough, and Heuser.
Mattsson, M. E. K., Enberg, G., Ruusala, A.-I., Hall, K., and Påhlman, S. Mitogenic response of human SH-SY5Y neuroblastoma cells to insulin-like growth factor I and II is dependent on the stage of differentiation. 102:1949.
Matuoka, K., Namba, M., and Mitsui, Y. Hyaluronate synthetase inhibition by normal and transformed human fibroblasts during growth reduction. 104:1105.
Matus, A., Ng, M., Pehling, G., Ackerann, M., and Hauser, K. Surface antigens of brain synapses: identification of minor proteins using polyclonal antisera. 98:237.
—, Pehling, G., Ackermann, M., and Maeder, J. Brain postsynaptic densities: Their relationship to glial and neuronal filaments. 87:346.
— *See* Bernhardt and Matus.
— *See* Brugg and Matus.
— *See* Garner and Matus.
— *See* Huber, Alaimo-Beuret, and Matus.
— *See* Huber and Matus.
Matus, A. I. *See* Ariano and Matus.
Matzuk, M. M., and Boime, I. The role of the asparagine-linked oligosaccharides of the α subunit in the secretion and assembly of human chori-

onic gonadotropin. 106:1049.
—, **Spangler, M. M., Camel, M., Suganuma, N., and Boime, I.** Mutagenesis and chimeric genes define determinants in the β-subunits of human chorionic gonadotropin and lutropin for secretion and assembly. 109:1429.
— *See* Corless, Matzuk, Ramabhadran, Krichevsky, and Boime.
Mauch, C., van der Mark, K., Helle, O., Mollenhauer, J., Pfaffle, M., and Krieg, T. A defective cell surface collagen-binding protein in dermatosparactic sheep fibroblasts. 106:205.
Mauchamp, J. *See* Chambard, Gabrion, and Mauchamp.
— *See* Chambard, Verrier, Gabrion, and Mauchamp.
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Maunus, R. *See* Habener, Maunus, Dee, and Potts.
Maunsbach, A. B. *See* Skriver, Maunsbach, and Jorgensen.
Maupin, P., and Pollard, T. D. Improved preservation and staining of HeLa cell actin filaments, clathrin-coated membranes, and other cytoplasmic structures by tannic acid-glutaraldehyde-saponin fixation. 96:51.
Maurer, A. *See* Costello, Chadwick, Saito, Chu, Maurer, and Fleischer.
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— *See* Storrie, Pool, Sachdeva, Maurey, and Oliver.
Maxfield, F. R. Weak bases and ionophores rapidly and reversibly raise the pH of endocytic vesicles in cultured mouse fibroblasts. 95:676.
— *See* Dunn, McGraw, and Maxfield.
— *See* Horwitz and Maxfield.
— *See* Keith, DiPaola, Maxfield, and Shelanski.
— *See* Kruskal, Keith, and Maxfield.
— *See* Kruskal and Maxfield.
— *See* McGraw, Dunn, and Maxfield.
— *See* McGraw, Greenfield, and Maxfield.
— *See* Ratan, Maxfield, and Shelanski.
— *See* Salzman and Maxfield.
— *See* Tycko, Keith, and Maxfield.
— *See* Yamashiro, Fluss, and Maxfield.
— *See* Yamashiro and Maxfield.
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May, G. S. The highly divergent β-tubulins of *Aspergillus nidulans* are functionally interchangeable. 109:2267.
—, **Gambino, J., Weatherbee, J. A., and Morris, N. R.** Identification and functional analysis of beta-tubulin genes by site specific integrative transformation in *Aspergillus nidulans*. 101:712.
— *See* Bloodgood and May.
— *See* Osmani, May, and Morris.
— *See* Weatherbee, May, Gambino, and Morris.
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— *See* Wagner, Mayadas, Urban-Pickering, Lewis, and Marder.
Maycox, P. R. *See* Bowles, Marcus, Pappin, Findlay, Eliopoulos, Maycox, and Burgess.
Mayer, E. P. *See* Greenspan, Mayer, and Fowler.
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Mayfield, S. P. *See* Malnoë, Mayfield, and Rochaix.
— *See* Nelson, Harpster, Mayfield, and Taylor.
Maylie-Pfenninger, M.-F., and Jamieson, J. D. Development of cell surface saccharides on embryonic pancreatic cells. 86:96.
— *See* Pfenninger and Maylie-Pfenninger.
Mayne, R., Wiedemann, H., Irwin, M. H., Sanderson, R. D., Fitch, J. M., Linsenmayer, T. F., and Kühn, K. Monoclonal antibodies against chicken type IV and V collagens: electron microscopic mapping of the epitopes after rotary shadowing. 98:1637.
— *See* Fitch, Gibney, Sanderson, Mayne, and Linsenmayer.
— *See* Fitch, Mayne, and Linsenmayer.
— *See* Irwin, Silvers, and Mayne.
— *See* Linsenmayer, Fitch, Schmid, Zak, Gibney, Sanderson, and Mayne.
— *See* Linsenmayer, Gibney, Fitch, Gross, and Mayne.
— *See* Sanderson, Fitch, Linsenmayer, and Mayne.
— *See* Vaughan, Mendler, Huber, Bruckner, Winterhalter, Irwin, and Mayne.
Mayrand, S., Setyono, B., Greenberg, J. R., and Pederson, T. Structure of nuclear ribonucleoprotein: Identification of proteins in contact with Poly(A)$^+$ heterogeneous nuclear RNA in living HeLa cells. 90:380.
Mazariegos, M. R., Tice, L. W., and Hand, A. R. Alteration of tight junctional permeability in the rat parotid gland after isoproterenol stimulation. 98:1865.
Mazauric-Stüker, M.-L. *See* Lang, Mazauric-Stüker, and Maelicke.
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— *See* Catterall, Stein, Kristo, Means, and O'Malley.
— *See* Deery, Means, and Brinkley.
— *See* Lin, Dedman, Brinkley, and Means.
— *See* Simmen, Dunbar, Guerriero, Chafouleas, Clark, and Means.
— *See* Tash, Hidaka, and Means.
— *See* Tash, Krinks, Patel, Means, Klee, and Means.
Means, R. L. *See* Tash, Krinks, Patel, Means, Klee, and Means.
Mecham, R. *See* Sage, Mecham, Johnson, and Bornstein.
Mecham, R. P., Griffin, G. L., Madaras, J. G., and Senior, R. M. Appearance of chemotactic responsiveness to elastin peptides by developing fetal bovine ligament fibroblasts parallels the onset of elastin production. 98:1813.
—, **Lange, G., Madaras, J., and Starcher, B.** Elastin synthesis by ligamentum nuchae fibroblasts: Effect of culture conditions and extracellular matrix on elastin production. 90:332.
—, **Madaras, J. G., and Senior, R. M.** Extracellular matrix-specific induction of elastogenic differentiation and maintenance of phenotypic stability in bovine ligament fibroblasts. 98:1804.
— *See* Goodenough, Gebhart, Mecham, and Heuser.
— *See* Senior, Griffin, Mecham, Wrenn, Prasad, and Urry.
Mechler, B. Membrane-bound ribosomes of myeloma cells. V. Subcellular distribution of immunoglobulin mRNA molecules. 88:37.
— Membrane-bound ribosomes of myeloma cells. VI. Initiation of immunoglobulin mRNA translation occurs on free ribosomes. 88:42.
—, **and Rabbitts, T. H.** Membrane-bound ribosomes of myeloma cells. IV. mRNA complexity of free and membrane-bound polysomes. 88:29.
Meda, P., Bruzzone, R., Knodel, S., and Orci, L. Blockage of cell-to-cell communication within pancreatic acini is associated with increased basal release of amylase. 103:475.
—, **Kohen, E., Kohen, C., Rabinovitch, A., and Orci, L.** Direct communication of homologous and heterologous endocrine islet cells in culture. 92:221.
— *See* Pepper, Spray, Chanson, Montesano, Orci, and Meda.
Medcalf, R. L., Van den Berg, E., and Schleuning, W.-D. Glucocorticoid-modulated gene expression of tissue- and urinary-type plasminogen activator and plasminogen activator inhibitor 1 and 2. 106:971.
— *See* Cajot, Schleuning, Medcalf, Bamat, Testuz, Liebermann, and Sordat.
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Meerhof, L. J. *See* Roos, Voetman, and Meerhof.
Meeusen, R. L., Bennett, J., and Cande, W. Z. Effect of microinjected N-ethylmaleimide-modified heavy meromyosin on cell division in amphibian eggs. 86:858.
— *See* Cande, McDonald, and Meeusen.
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Mehrabian, M., Bame, K. J., and Rome, L. H. Interaction of rat liver lysosomal membranes with actin. 99:680.
Mehta, H., Orphe, C., Todd, M. S., Cornbrooks, C. J., and Carey, D. J. Synthesis by Schwann cells of basal lamina and membrane-associated heparan sulfate proteoglycans. 101:660.
Mehta, P. P., Bertram, J. S., and Loewenstein, W. R. The actions of retinoids on cellular growth correlate with their actions on gap junctional communication. 108:1053.
— *See* Keane, Mehta, Rose, Honig, Loewenstein, and Rutishauser.
Meier, K. E., Snavely, M. D., Brown, S. L., Brown, J. H., and Insel, P. A. α_1- and β_2-Adrenergic receptor expression in the Madin-Darby canine kidney renal epithelial cell line. 97:405.
Meier, P. J., Sztul, E. S., Reuben, A., and Boyer, J. L. Structural and functional polarity of canalicular and basolateral plasma membrane vesicles isolated in high yield from rat liver. 98:991.
Meigs, J. B., and Wang, Y.-L. Reorganization of alpha-actinin and vinculin induced by a phorbol ester in living cells. 102:1430.
— *See* McKenna, Meigs, and Wang.
— *See* McNeil, Tanasugarn, Meigs, and Taylor.
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— *See* Schindler, Meiners, and Cheresh.
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— *See* Defize, Boonstra, Meisenhelder, Kruijer, Tertoolen, Tilly, Hunter, van Bergen en Henegouwen, Moolenaar, and de Laat.
Meiss, H. K. *See* Green, Meiss, and Rodriguez-Boulan.

Meizel, S. *See* Mrsny and Meizel.
Mekada, E., Okada, Y., and Uchida, T. Identification of diphtheria toxin receptor and a nonproteinous diptheria toxin–binding molecule in *Vero* cell membrane. 107:511.
— *See* Kaneda, Uchida, Mekada, Nakanishi, and Okada.
Melancon, P. *See* Cutler, Melancon, and Garoff.
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Melchior, V., Hollingshead, C. J., and Cahoon, M. E. Stacking in lipid vesicle-tubule mixtures is an artifact of negative staining. 86:881.
— *See* Hollingshead, Caspar, Melchior, and Kirschner.
Melchiori, A. *See* Albini, Allavena, Melchiori, Giancotti, Richter, Comoglio, Parodi, Martin, and Tarone.
Meldolesi, J., Corte, G., Peitrini, G., and Borgese, N. Localization and biosynthesis of NADH-cytochrome b_5 reductase, an integral membrane protein, in rat liver cells. II. Evidence that a single enzyme accounts for the activity in its various subcellular locations. 85:516.
— *See* Borgese and Meldolesi.
— *See* Borgese, Pietrini, and Meldolesi.
— *See* Giannattasio, Zanini, Rosa, Meldolesi, Margolis, and Margolis.
— *See* Hashimoto, Bruno, Lew, Pozzan, Volpe, and Meldolesi.
— *See* Hashimoto, Fumagalli, Zanini, and Meldolesi.
— *See* Malgaroli, Milani, Meldolesi, and Pozzan.
— *See* Pozzan, Gatti, Dozzio, Vicentini, and Meldolesi.
— *See* Tanaka, De Camilli, and Meldolesi.
— *See* Valtorta, Madeddu, Meldolesi, and Ceccarelli.
— *See* Vicentini, Ambrosini, Di Virgilio, Pozzan, and Meldolesi.
— *See* Zanini, Giannattasio, Nussdorfer, Margolis, Margolis, and Meldolesi.
Meleka, I. *See* Wall and Meleka.
Melera, P. W. *See* Lewis, Biedler, and Melera.
— *See* Meyers, Spengler, Chang, Melera, and Biedler.
Melkonian, M. *See* McFadden, Schulze, Surek, Salisbury, and Melkonian.
— *See* Salisbury, Baron, Surek, and Melkonian.
Mellman, I., and Plutner, H. Internalization and degradation of macrophage Fc receptors bound to polyvalent immune complexes. 98:1170.
—, Plutner, H., and Ukkonen, P. Internalization and rapid recycling of macrophage Fc receptors tagged with monovalent antireceptor antibody: possible role of a prelysosomal compartment. 98:1163.
— *See* Geuze, Stoorvogel, Strous, Slot, Zijderhand-Bleekemolen, and Mellman.
— *See* Green, Zimmer, Griffiths, and Mellman.
— *See* Hunziker and Mellman.
— *See* Lewis, Green, Marsh, Vihko, Helenius, and Mellman.
— *See* Marsh, Schmid, Kern, Harms, Male, Mellman, and Helenius.
— *See* Robbins, Oliver, Bateman, Krag, Galloway, and Mellman.
— *See* Roff, Fuchs, Mellman, and Robbins.
— *See* Schmid, Fuchs, Kielian, Helenius, and Mellman.
Mellman, I. S., Plutner, H., Steinman, R. M., Unkeless, J. C., and Cohn, Z. A. Internalization and degradation of macrophage Fc receptors during receptor-mediated phagocytosis. 96:887.
—, Steinman, R. M., Unkeless, J. C., and Cohn, Z. A. Selective iodination and polypeptide composition of pinocytic vesicles. 86:712.
— *See* Horwich, Fenton, Firgaira, Fox, Kolansky, Mellman, and Rosenberg.
— *See* Steinman, Mellman, Muller, and Cohn.
Melmed, R. N., Karanian, P. J., and Berlin, R. D. Control of cell volume in the J774 macrophage by microtubule dissassembly and cyclic AMP. 90:761.
Meltzer, D. I. *See* Blose, Meltzer, and Feramisco.
Memoli, V. A. *See* Kuettner, Memoli, Pauli, Wrobel, Thonar, and Daniel.
— *See* Kuettner, Pauli, Gall, Memoli, and Schenk.
— *See* Rifas, Uitto, Memoli, Kuettner, Henry, and Peck.
Méndez, E. *See* Díaz-Nido, Serrano, Méndez, and Avila.
Mendler, M., Eich-Bender, S. G., Vaughan, L., Winterhalter, K. H., and Bruckner, P. Cartilage contains mixed fibrils of collagen types II, IX, and XI. 108:191.
— *See* Bruckner, Hörler, Mendler, Houze, Winterhalter, Eich-Bender, and Spycher.
— *See* Vaughan, Mendler, Huber, Bruckner, Winterhalter, Irwin, and Mayne.
Mendoza, S. A., Schneider, J. A., Lopez-Rivas, A., Sinnett-Smith, J. W., and Rozengurt, E. Early events elicited by bombesin and structurally related peptides in quiescent Swiss 3T3 cells. II. Changes in Na^+ and Ca^{2+} fluxes, Na^+/K^+ pump activity, and intracellular pH. 102:2223.
Mengele, R. *See* Ertl, Mengele, Wenzl, Engel, and Sumper.
Mengersen, A. *See* Huang, Mengersen, and Lee.
Menko, A. S. *See* Atkinson, Menko, Johnson, Sheppard, and Sheridan.
— *See* Sas, Sas, Johnson, Menko, and Johnson.
Menon, A. K., Holowka, D., and Baird, B. Small oligomers of immunoglobulin E (IgE) cause large-scale clustering of IgE receptors on the surface of rat basophilic leukemia cells. 98:577.
—, Holowka, D., Webb, W. W., and Baird, B. Clustering, mobility, and triggering activity of small oligomers of immunoglobulin E on rat basophilic leukemia cells. 102:534.
—, Holowka, D., Webb, W. W., and Baird, B. Cross-linking of receptor-bound IgE to aggregates larger than dimers leads to rapid immobilization. 102:541.
Mercier, F., Reggio, H., Devilliers, G., Bataille, D., and Mangeat, P. Membrane-cytoskeleton dynamics in rat parietal cells: mobilization of actin and spectrin upon stimulation of gastric acid secretion. 108:441.
Mercurio, A. M., and Shaw, L. M. Macrophage interactions with laminin: PMA selectively induces the adherence and spreading of mouse macrophages on a laminin substratum. 107:1873.
Merenmies, J. *See* Rauvala, Merenmies, Pihlaskari, Korkolainen, Huhtala, and Panula.
Merion, M., and Sly, W. S. The role of intermediate vesicles in the adsorptive endocytosis and transport of ligand to lysosomes by human fibroblasts. 96:644.
Merisko, E. *See* Rodman, Kerjaschki, Merisko, and Farquhar.
Merisko, E. M., Farquhar, M. G., and Palade, G. E. Coated vesicle isolation by immunoadsorption on *Staphylococcus aureus* cells. 92:846.
— *See* Chen and Merisko.
Merkel, S. J., Kaneshiro, E. S., and Gruenstein, E. I. Characterization of the cilia and ciliary membrane proteins of wild-type *Paramecium tetraurelia* and a pawn mutant. 89:206.
Merkl, R. *See* Fisher, Merkl, and Gerisch.
Merkle, R. K. *See* Pathak, Merkle, Cummings, Goldstein, Brown, and Anderson.
Merlie, J. P., Isenberg, K. E., Russell, S. D., and Sanes, J. R. Denervation supersensitivity in skeletal muscle: analysis with a cloned cDNA probe. 99:332.
— *See* Covault, Merlie, Goridis, and Sanes.
— *See* Musil, Carr, Cohen, and Merlie.
— *See* Musil, Frail, and Merlie.
Merrilees, M. J. *See* Aubin, Heersche, Merrilees, and Sodek.
Merte, C. *See* Achler, Filmer, Merte, and Drenckhahn.
— *See* Tilney, Tilney, Stephens, Merte, Drenckhahn, Cotanche, and Bretscher.
Merz, P. *See* Moon, Wisniewski, Merz, De Martini, and Wisniewski.
Mescher, M. F. *See* Apgar, Herrmann, Robinson, and Mescher.
— *See* Apgar and Mescher.
— *See* Stallcup, Burakoff, and Mescher.
— *See* Stallcup, Dawson, and Mescher.
Mesland, D. A. M., Hoffman, J. L., Caligor, E., and Goodenough, U. W. Flagellar tip activation stimulated by membrane adhesions in *Chlamydomonas* gametes. 84:599.
— *See* Roos, Spiele, Feltkamp, Huisman, Wiegant, Traas, and Mesland.
Messner, D. J., Griffiths, G., and Kornfeld, S. Isolation and characterization of membranes from bovine liver which are highly enriched in mannose 6-phosphate receptors. 108:2149.
Metcalf, T. N., III, Villanueva, M. A., Schindler, M., and Wang, J. L. Monoclonal antibodies directed against protoplasts of soybean cells: analysis of the lateral mobility of plasma membrane–bound antibody MVS-1. 102:1350.
Metcalfe, J. C. *See* Beaven, Guthrie, Moore, Smith, Hesketh, and Metcalfe.
Metspalu, A. *See* Steitz, Berg, Hendrick, La Branche-Chabot, Metspalu, Rinke, and Yario.
Mevel-Ninio, M., and Weiss, M. C. Immunofluorescence analysis of the time-course of extinction, reexpression, and activation of albumin production in rat hepatoma-mouse fibroblast heterokaryons and hybrids. 90:339.
Meyer, B. C. *See* Di Virgilio, Meyer, Greenburg, and Silverstein.
Meyer, D. B. *See* Johnson, Taylor, and Meyer.
Meyer, D. I., and Dobberstein, B. A membrane component essential for vectorial translocation of nascent proteins across the endoplasmic reticulum: Requirements for its extraction and reassociation with the membrane. 87:498.
—, and Dobberstein, B. Identification and characterization of a membrane component essential for the translocation of nascent proteins across the membrane of the endoplasmic reticulum. 87:503.
—, Louvard, D., and Dobberstein, B. Characterization of molecules involved in protein translocation using a specific antibody. 92:579.
— *See* Hortsch, Avossa, and Meyer.
— *See* Sanz and Meyer.
Meyer, D. J., Afonso, C. L., and Galbraith, D. W. Isolation and characterization of monoclonal antibodies directed against plant plasma membrane and cell wall epitopes: identification of a monoclonal antibody that recognizes extensin and analysis of the process of epitope biosynthesis in plant tissues and cell cultures. 107:163.
—, Griffiths, G., and Kornfeld, S. Isolation and characterization of mem-

branes from bovine liver which are highly enriched in mannose 6-phosphate receptors. 108:2149.
—, Yancey, S. B., Revel, J. P., and Peskoff, A. Intercellular communication in normal and regenerating rat liver: a quantitative analysis. 91:505.
Meyer, G. *See* Canipari, O'Connell, Meyer, and Strickland.
Meyer, H., z. A. *See* Broughton, Wong, Lewin, Samrey, Myint, Meyer, Dowling, and Simon.
Meyer, S. L. F., Kaminskyj, S. G. W., and Heath, I. B. Nuclear migration in a *nud* mutant of *Aspergilius nidulans* is inhibited in the presence of a quantitatively normal population of cytoplasmic microtubules. 106:773.
Meyer, W. H. *See* Howard and Meyer.
Meyers, M. *See* Johnson, Ross, Meyers, Spitznagel, and Bunge.
Meyers, M. B., Spengler, B. A., Chang, T.-D., Melera, P. W., and Biedler, J. L. Gene amplification-associated cytogenetic aberrations and protein changes in vincristin-resistant Chinese hamster, mouse, and human cells. 100:588.
Meyers, P. *See* Diglio, Wolfe, and Meyers.
Meyers-Hutchins, B. L. *See* Galvin, Stockhausen, Meyers-Hutchins, and Frazier.
Meza, I., Ibarra, G., Sabanero, M., Martinez-Palomo, A., and Cereijido, M. Occluding junctions and cytoskeletal components in a cultured transporting epithelium. 87:746.
— *See* Carron, Hwo, Dingus, Benson, Meza, and Bryan.
— *See* Martinez-Palomo, Meza, Beaty, and Cereijido.
— *See* Rosenfeld, Hou, Dingus, Meza, and Bryan.
— *See* Sabanero, Gonzalez-Robles, and Meza.
— *See* Talamás-Rohana and Meza.
Mezei, C. *See* LeBlanc, Földvári, Spencer, Breckenridge, Fenwick, Williams, and Mezei.
Miake-Lye, R., Newport, J., and Kirschner, M. Maturation-promoting factor induces nuclear envelope breakdown in cycloheximide-arrested embryos of *Xenopus laevis*. 97:81.
Miao, P., and Black, V. H. Guinea pig adrenocortical cells: in vitro characterization of separated zonal cell types. 94:241.
— *See* Neff, Bourret, Miao, and Dice.
Michaels, A. S. *See* Herrin, Michaels, and Paul.
Michaels, J. E. *See* Cardell, Michaels, Hung, and Cardell.
Miche, S. M. *See* Coleman, Harris, Miche, Mooseker, and Morrow.
Michel-Wolvertz, M.-R. *See* Matagne, Michel-Wolvertz, Munaut, Duyckaerts, and Sluse.
Michels, R. G. *See* Glaser, D'Amore, Michels, Patz, and Fenselau.
Michetti, P. *See* Weltzin, Lucia-Jandris, Michetti, Fields, Kraehenbuhl, and Neutra.
Michl, J. *See* Wang, Michl, Pfeffer, Silverstein, and Tamm.
Mierendorf, R. C., Jr., Cardelli, J. A., and Dimond, R. L. Pathways involved in targeting and secretion of a lysosomal enzyme in *Dictyostelium discoideum*. 100:1777.
Mifune, K. *See* Ono, Mifune, Yoshimura, Ohnishi, and Kuwano.
Migliaccio, A. R. *See* Migliaccio, Migliaccio, Kreider, Rovera, and Adamson.
Migliaccio, G., Migliaccio, A. R., Kreider, B. L., Rovera, G., and Adamson, J. W. Selection of lineage-restricted cell lines immortalized at different stages of hematopoietic differentiation from the murine cell line 32D. 109:833.
— *See* Torrisi, Lotti, Pavan, Migliaccio, and Boratti.
Mignatti, P., Tsuboi, R., Robbins, E., and Rifkin, D. B. In vitro angiogensis on the human amniotic membrane: requirement for basic fibroblast growth factor–induced proteinases. 108:671.
Mikawa, T. *See* Ohashi, Mikawa, and Maruyama.
Miki-Noumura, T. *See* Hosokawa and Miki-Noumura.
Mikkelsen, R. B., Tanabe, K., and Wallach, D. F. H. Membrane potential of *Plasmodium*-infected erythrocytes. 93:685.
— *See* Klempner, Mikkelsen, Corfman, and Andre-Schwartz.
— *See* Tanabe, Mikkelsen, and Wallach.
Mikol, D. D., and Stefansson, K. A phosphatidylinositol-linked peanut agglutinin–binding glycoprotein in central nervous system myelin and on oligodendrocytes. 106:1273.
Mikoshiba, K. *See* Pfeiffer, Jakob, Mikoshiba, Dubois, Guenet, Nicolas, Gaillard, Chevance, and Jacob.
Mikuni-Takagaki, Y., and Toole, B. P. Cell-substratum attachment and cell surface hyaluronate of Rous sarcoma virus-transformed chondrocytes. 85:481.
Milam, L., and Erickson, H. P. Visualization of a 21-nm axial periodicity in shadowed keratin filaments and neurofilaments. 94:592.
Milani, D. *See* Malgaroli, Milani, Meldolesi, and Pozzan.
Milarski, K. L., and Morimoto, R. I. Mutational analysis of the human HSP70 protein: distinct domains for nucleolar localization and adenosine triphosphate binding. 109:1947.
—, Welch, W. J., and Morimoto, R. I. Cell cycle–dependent association of HSP70 with specific cellular proteins. 108:413.
Miles, L. A. *See* Plow, Freaney, Plescia, and Miles.
Milgrom, E. *See* Perrot-Applanat, Groyer-Picard, Logeat, and Milgrom.
Milici, A. J., Watrous, N. E., Stukenbrok, H., and Palade, G. E. Transcytosis of albumin in capillary endothelium. 105:2603.
Miljanich, G. P., Brasier, A. R., and Kelly, R. B. Partial purification of presynaptic plasma membrane by immunoadsorption. 94:88.
Milks, L. C., Brontoli, M. J., and Cramer, E. B. Epithelial permeability and the transepithelial migration of human neutrophils.96:1241.
—, Conyers, G. P., and Cramer, E. B. The effect of neutrophil migration on epithelial permeability. 103:2729.
— *See* Cramer, Milks, Brontoli, Ojakian, Wright, and Showell.
Miller, D. E. *See* Beckerle, Miller, Bertagnolli, and Locke.
Miller, D. K., Feuer, B. I., Vanderoef, R., and Lenard, J. Reconstituted G protein-lipid vesicles from vesicular stomatitis virus and their inhibition of VSV infection. 84:421.
—, Griffiths, E., Lenard, J., and Firestone, R. A. Cell killing by lysosomotropic detergents. 97:1841.
—, and Lenard, J. Inhibition of vesicular stomatitis virus infection by spike glycoprotein. Evidence for an intracellular, G protein-requiring step. 84:430.
Miller, D. M., III *See* Epstein, Miller, Ortiz, and Berliner.
Miller, E. J. *See* Martinez-Hernandez, Gay, and Miller.
Miller, F. D., Naus, C. C. G., Durand, M., Bloom, F. E., and Milner, R. J. Isotypes of α-tubulin are differentially regulated during neuronal maturation. 105:3065.
Miller, F. J. *See* Sluder, Miller, and Rieder.
Miller, H. P. *See* Farrell, Jordan, Miller, and Wilson.
— *See* Wilson, Miller, Pfeffer, Sullivan, and Detrich.
Miller, J. A. *See* Ellisman, Miller, and Agnew.
Miller, J. B., Crow, M. T., and Stockdale, F. E. Slow and fast myosin heavy chain content defines three types of myotubes in early muscle cell cultures. 101:1643.
—, and Stockdale, F. E. Developmental regulation of the multiple myogenic cell lineages of the avian embryo. 103:2197.
Miller, K., Beardmore, J., Kanety, H., Schlessinger, J., and Hopkins, C. R. Localization of the epidermal growth factor (EGF) receptor within the endosome of EGF-stimulated epidermoid carcinoma (A431) cells. 102:500.
Miller, K. G., Field, C. M., and Alberts, B. M. Actin-binding proteins from *Drosophila* embryos: a complex network of interacting proteins detected by F-actin affinity chromatography. 109:2963.
— *See* Drubin, Miller, and Botstein.
Miller, K. R., and Jacob, J. S. Two-dimensional crystals formed from photosynthetic reaction centers. 97:1266.
— *See* Hinshaw and Miller.
— *See* Jacob and Miller.
— *See* Lyon and Miller.
— *See* Siegel, Jordan, and Miller.
Miller, L. H. *See* Aikawa, Miller, Rabbege, and Epstein.
— *See* Leech, Barnwell, Aikawa, Miller, and Howard.
Miller, L. J. *See* Rosenzweig, Miller, and Jamieson.
Miller, R. E. *See* Bennett, Paulson, Miller, and Darnell.
Miller, R. H., and Lasek, R. J. Cross-bridges mediate anterograde and retrograde vesicle transport along microtubules in squid axoplasm. 101:2181.
— *See* ffrench-Constant, Miller, Kruse, Schachner, and Raff.
— *See* Klymkowsky, Miller, and Lane.
Miller, R. L. *See* Rothman, Miller, and Urbani.
Miller, T. M., and Goodenough, D. A. Evidence for two physiologically distinct gap junctions expressed by the chick lens epithelial cell. 102:194.
—, and Goodenough, D. A. Gap junction structures after experimental alteration of junctional channel conductance. 101:1741.
—, and Heuser, J. E. Endocytosis of synaptic vesicle membrane at the frog neuromuscular junction. 98:685.
Millette, C. F. *See* Enders, Henson, and Millette.
— *See* Gerton and Millette.
— *See* Wolf, Scott, and Milette.
Milligan, R. A., and Flicker, P. F. Structural relationships of actin, myosin, and tropomyosin revealed by cryo-electron microscopy. 105:29.
—, and Unwin, P. N. T. In vitro crystallization of ribosomes from chick embryos. 95:648.
— *See* Unwin and Milligan.
Millonig, R., Salvo, H., and Aebi, U. Probing actin polymerization by intermolecular cross-linking. 106:785.
Mills, A. D. *See* Sheehan, Mills, Sleeman, Laskey, and Blow.
Mills, J. W., MacKnight, D. C., Jarrell, J. A., Dayer, J. M., and Ausiello,

D. A. Interaction of ouabain with the Na^+ pump in intact epithelial cells. 88:637.
Milner, R. J. *See* Miller, Naus, Durand, Bloom, and Milner.
Milos, P. *See* Roy, Bloom, Milos, and Monroe.
Milstein, C. *See* Kilmartin, Wright, and Milstein.
Milstone, L. M. Isolation and characterization of two polypeptides that form intermediate filaments in bovine esophageal epithelium. 88:317.
—, **and McGuire, J.** Different polypeptides form the intermediate filaments in bovine hoof and esophageal epithelium and in aortic endothelium. 88:312.
Mimura, N., and Asano, A. Characterization and localization of actinogelin, a Ca^{2+}-sensitive actin accessory protein, in monmuscle cells. 93:899.
Minden, J. S., Agard, D. A., Sedat, J. W., and Alberts, B. M. Direct cell lineage analysis in *Drosophila melanogaster* by time-lapse, three-dimensional optical microscopy of living embryos. 109:505.
Mingari, M.-C. *See* Azzarone, Suarez, Mingari, Moretta, and Fauci.
Minick, C. R. *See* Falcone, Mateo, Shio, Minick, and Fowler.
Minoo, P., Sullivan, W., Solomon, L. R., Martin, T. E., Toft, D. O., and Scott, R. E. Loss of proliferative potential during terminal differentiation coincides with the decreased abundance of a subset of heterogeneous ribonuclear proteins. 109:1937.
Minoshima, S. *See* Hirai, Gamou, Minoshima, and Shimizu.
Minty, A. *See* Hardeman, Minty, Benton-Vosman, Kedes, and Balu.
Miodonski-Maculewicz, N. M. *See* Zimmermann, Schaer, Muller, Schneider, Miodonski-Maculewicz, and Schindler.
Mirsky, R., Winter, J., Abney, E. R., Pruss, R. M., Gavrilovic, J., and Raff, M. C. Myelin-specific proteins and glycolipids in rat Schwann cells and oligodendrocytes in culture. 84:483.
— *See* Jessen, Morgan, Brammer, and Mirsky.
Mische, S. M., Mooseker, M. S., and Morrow, J. S. Erythrocyte adducin: a calmodulin-regulated actin-bundling protein that stimulates spectrin–actin binding. 105:2837.
Mischke, D. *See* Toffenetti, Mischke, and Pardue.
Misek, D. E. *See* Salas, Misek, Vega-Salas, Gundersen, Cereijido, and Rodriguez-Boulan.
Mishal, Z. *See* Gorvel, Mishal, Liegey, Rigal, and Maroux.
Mishkind, M., Raikhel, N. V., Palevitz, B. A., and Keegstra, K. Immunocytochemical localization of wheat germ agglutinin in wheat. 92:753.
Mishkind, M. L., Wessler, S. R., and Schmidt, G. W. Functional determinants in transit sequences: import and partial maturation by vascular plant chloroplasts of the ribulose-1,5-biphosphate carboxylase small subunit of *Chlamydomonas*. 100:226.
Miskimins, W. K., McClelland, A., Roberts, M. P., and Ruddle, F. H. Cell proliferation and expression of the transferrin receptor gene: promoter sequence homologies and protein interactions. 103:1781.
Miskin, R. *See* Hatzfeld, Miskin, and Reich.
Misset, O. *See* Opperdoes, Baudhuin, Coppens, De Roe, Edwards, Weijers, and Misset.
Mistronicola, M. R. *See* Picone, Kajtaniak, Nielsen, Behrendt, Mistronicola, Cubellis, Stoppelli, Pedersen, Danø, and Blasi.
Mitchell, C. K., and Redburn, D. A. Analysis of pre- and postsynaptic factors of the serotonin system in rabbit retina. 100:64.
Mitchell, D. R., and Rosenbaum, J. L. A motile *Chlamydomonas* flagellar mutant that lacks outer dynein arms. 100:1228.
—, **and Warner, F. D.** Interactions of dynein arms with B subfibers of *Tetrahymena* cilia: Quantitation of the effects of magnesium and adenosine triphosphate. 87:84.
— *See* Warner and Mitchell.
— *See* Williams, Mitchell, and Rosenbaum.
Mitchell, J. *See* Gilmartin, Mitchell, Vidrich, and Freedberg.
Mitchell, J. J. *See* Low, Woodcock-Mitchell, Mitchell, Arnold, and Absher.
Mitchell, L. H. *See* Soll and Mitchell.
Mitchell, R. *See* Neufeld, Mitchell, Ponte, and Gospodarowicz.
Mitchell, R. D., Palade, P., and Fleischer, S. Purification of morphologically intact triad structures from skeletal muscle. 96:1008.
—, **Saito, A., Palade, P., and Fleischer, S.** Morphology of isolated triads. 96:1017.
Mitchison, T. *See* Evans, Mitchison, and Kirschner.
— *See* Karsenti, Kobayashi, Mitchison, and Kirschner.
— *See* Kristofferson, Mitchison, and Kirschner.
Mitchison, T. J. Polewards microtubules flux in the mitotic spindle: evidence from photoactivation of fluorescence. 109:637.
—, **and Kirschner, M. W.** Properties of the kinetochore in vitro. I. Microtubule nucleation and tubulin binding. 101:755.
—, **and Kirschner, M. W.** Properties of the kinetochore in vitro. II. Microtubule capture and ATP-dependent translocation. 101:766.
— *See* Leslie, Saxton, Mitchison, Neighbors, Salmon, and McIntosh.
Mitra, A. K., McCarthy, M. P., and Stroud, R. M. Correction. 109:1885.
—, **McCarthy, M. P., and Stroud, R. M.** Three-dimensional structure of the nicotinic acetylcholine receptor, and location of the major associated 43-kD cytoskeletal protein, determined at 22 Å by low dose electron microscopy and x-ray diffraction to 12.5 Å. 109:755.
Mitsui, Y. *See* Matuoka, Namba, and Mitsui.
Mittal, B., Sanger, J. M., and Sanger, J. W. Visualization of myosin in living cells. 105:1753.
— *See* Sanger, Mittal, Pochapin, and Sanger.
— *See* Sanger, Mittal, and Sanger.
Miyata, H., Bowers, B., and Korn, E. D. Plasma membrane association of *Acanthamoeba* myosin I. 109:1519.
Miyata, S., and Akazawa, T. Biosynthesis of rice seed α-amylase: proteolytic processing and glycosylation of precursor polypeptides by microsomes. 96:802.
Miyatani, S., Winkles, J. A., Sargent, T. D., and Dawid, I. B. Stage-specific keratins in *Xenopus laevis* embryos and tadpoles: the XK81 gene gamily. 103:1957.
Miyazaki, S. Inositol 1, 4, 5-trisphosphate–induced calcium release and guanosine nucleotide-binding protein-mediated periodic calcium rises in golden hamster eggs. 106:345.
Mizuno, S. *See* Takei, Kikuchi, Kikuchi, Mizuno, and Shimura.
— *See* Takei, Oyama, Kimura, Hyodo, Mizuno, and Shimura.
Mizzen, L. A., and Welch, W. J. Characterization of the thermotolerant cell. I. Effects on protein synthesis activity and the regulation of heat-shock protein 70 expression. 106:1105.
— *See* Welch and Mizzen.
Mocz, G., Tang, W.-J. Y., and Gibbons, I. R. A map of photolytic and tryptic cleavage sites on the β heavy chain of dynein ATPase from sea urchin sperm flagella. 106:1607.
Modricky, C. *See* de Bernard, Bianco, Bonucci, Costantini, Lunazzi, Martinuzzi, Modricky, Moro, Panfili, Pollesello, Stagni, and Vittur.
Moed, P. *See* Boonstra, Moolenaar, Harrison, Moed, van der Saag, and de Laat.
Moehle, C. M., Dixon, C. K., and Jones, E. W. Processing pathway for protease B of *Saccharomyces cerevisiae*. 108:309.
Moellmann, G. *See* Dotto, Moellmann, Ghosh, Edwards, and Halaban.
— *See* Halaban, Langdon, Birchall, Cuono, Baird, Scott, Moellmann, and McGuire.
Moenner, M. *See* Schreiber, Kenney, Kowalski, Thomas, Gimenez-Gallego, Rios-Candelore, Di Salvo, Barritault, Courty, Courtois, Moenner, Loret, Burgess, Mehlman, Friesel, Johnson, and Maciag.
Moens, P. B., Heyting, C., Dietrich, A. J. J., van Raamsdonk, W., and Chen, Q. Synaptonemal complex antigen location and conservation. 105:93.
Moeremans, M. *See* Langanger, De May, Moeremans, Daneels, De Brabander, and Small.
— *See* Langanger, Moeremans, Daneels, Sobieszek, De Brabander, and De Mey.
Moessner, J. *See* Logsdon, Moessner, Williams, and Goldfine.
Mogensen, M. M., Tucker, J. B., and Stebbings, H. Microtubule polarities indicate that nucleation and capture of microtubules occurs at cell surfaces in *Drosophila*. 108:1445.
Mohandas, N. *See* Chasis and Mohandas.
— *See* Chasis, Reid, Jensen, and Mohandas.
Mohr, F. C., and Fewtrell, C. Depolarization of rat basophilic leukemia cells inhibits calcium uptake and exocytosis. 104:783.
Mohraz, M., Simpson, M. V., and Smith, P. R. The three-dimensional structure of the Na, K-ATPase from electron microscopy. 105:1.
—, **and Smith, P. R.** Structure of (Na^+, K^+)-ATPase as revealed by electron microscopy and image processing. 98:1836.
Moir, R. D. *See* Stewart, Quinlan, and Moir.
Molano, J., Bowers, B., and Cabib, E. Distribution of chitin in the yeast cell wall. An ultrastructural and chemical study. 85:199.
Molday, L. L. *See* Molday and Molday.
Molday, R. S., and Molday, L. L. Differences in the protein composition of bovine retinal rod outer segment disk and plasma membranes isolated by a ricin–gold–dextran density perturbation method. 105:2589.
Molé-Bajer, J., and Bajer, A. S. Action of taxol on mitosis: modification of microtubule arrangements and function of the mitotic spindle in *Haemanthus* endosperm. 96:527.
— *See* Bajer and Molé-Bajer.
Molinaro, M. *See* Adamo, Caporale, Nervi, Ceci, and Molinaro.
— *See* Eusebi, Molinaro, and Zani.
Moll, R., Franke, W. W., Volc-Platzer, B., and Krepler, R. Different keratin polypeptides in epidermis and other epithelia of human skin: a specific cytokeratin of molecular weight 46,000 in epithelia of the pilosebaceous tract and basal cell epitheliomas. 95:285.
— *See* Bosch, Leube, Achstätter, Moll, and Franke.
— *See* Kartenbeck, Schwechheimer, Moll, and Franke.
— *See* Knapp, Franke, Heid, Hatzfeld, Jorcano, and Moll.

— *See* Krohne, Stick, Kleinschmidt, Moll, Franke, and Hausen.
Moll, T. *See* Pon, Moll, Vestweber, Marshallsay, and Schatz.
Mollay, C. *See* Flucher, Lenglachner-Bachinger, Pohlhammer, Adam, and Mollay.
Mollenhauer, J., Bee, J. A., Lizarbe, M. A., and von der Mark, K. Role of anchorin CII, a 31,000-mol-wt membrane protein, in the interaction of chondrocytes with type II collagen. 98:1572.
— *See* Mauch, van der Mark, Helle, Mollenhauer, Pfaffle, and Krieg.
Møller, C. J. *See* Nybroe, Albrechtsen, Dahlin, Linneman, Lyles, Møller, and Bock.
Moller, M. *See* Van Deurs, Von Bulow, and Moller.
Molnar, J. *See* Gudewicz, Molnar, Lai, Beezhold, Siefring, Credo, and Lorand.
Molski, T. F. P. *See* Sha'afi, Shefcyk, Yassin, Molski, Volpi, Naccache, White, Feinstein, and Becker.
— *See* Yassin, Shefcyk, White, Tao, Volpi, Molski, Naccache, Feinstein, and Sha'afi.
Momayezi, M., Lumpert, C. J., Kersken, H., Gras, U., Plattner, H., Krinks, M. H., and Klee, C. B. Exocytosis induction in *Paramecium tetraurelia* cells by exogenous phosphoprotein phosphatase in vivo and in vitro: possible involvement of calcineurin in exocytotic membrane fusion. 105:181.
Monaghan, P. *See* Warburton, Ormerod, Monaghan, Ferns, and Rudland.
Mond, J. J. *See* Feuerstein, Spiegel, and Mond.
Monfalcone, L. L. *See* Estes, Monfalcone, Hammes, Holowka, and Baird.
Monier, S., Van Luc, P., Kreibich, G., Sabatini, D. D., and Adesnik, M. Signals for the incorporation and orientation of cytochrome P450 in the endoplasmic reticulum membrane. 107:457.
Monod, A. *See* Lew, Monod, Waldvogel, Dewald, Baggiolini, and Pozzan.
Monroe, M. *See* Roy, Bloom, Milos, and Monroe.
Monteiro, M. J., and Cleveland, D. W. Expression of NF-L and NF-M in fibroblasts reveals coassembly of neurofilament and vimentin subunits. 108:579.
Montell, S. J., and Goodman, C. S. *Drosophila* laminin: sequence of B2 subunit and expression of all three subunits during embryogenesis. 109:2441.
Montesano, R., Mossaz, A., Ryser, J.-E., Orci, L., and Vassalli, P. Leukocyte interleukins induce cultured endothelial cells to produce a highly organized, glycosaminoglycan-rich pericellular matrix. 99:1706.
—, **Mossaz, A., Vassalli, P., and Orci, L.** Specialization of the macrophage plasma membrane at sites of interaction with opsonized erythrocytes. 96:1227.
—, **Mouron, P., Amherdt, M., and Orci, L.** Collagen matrix promotes reorganization of pancreatic endocrine cell monolayers into islet-like organoids. 97:935.
—, **Orci, L., and Vassalli, P.** In vitro rapid organization of endothelial cells into capillary-like networks is promoted by collagen matrices. 97:1648.
— *See* Lombardi, Montesano, Furie, Silverstein, and Orci.
— *See* Pepper, Spray, Chanson, Montesano, Orci, and Meda.
— *See* Pepper, Vassalli, Montesano, and Orci.
Montgomery, R. R. *See* Newman, Kawai, Montgomery, and Kunicki.
— *See* Okita, Pidard, Newman, Montgomery, and Kunicki.
Moolenaar, W. H. *See* Boonstra, Moolenaar, Harrison, Moed, van der Saag, and de Laat.
— *See* Defize, Boonstra, Meisenhelder, Kruijer, Tertoolen, Tilly, Hunter, van Bergen en Henegouwen, Moolenaar, and de Laat.
Moon, H. M., Wisniewski, T., Merz, P., De Martini, J., and Wisniewski, H. M. Partial purification of neurofilament subunits from bovine brains and studies on neurofilament assembly. 89:560.
Moon, R. T., and Lazarides, E. Biogenesis of the avian erythroid membrane skeleton: receptor-mediated assembly and stabilization of ankyrin (goblin) and spectrin. 98:1899.
—, **and Lazarides, E.** Canavanine inhibits vimentin assembly but not its synthesis in chicken embryo erythroid cells. 97:309.
—, **Ngai, J., Wold, B. J., and Lazarides, E.** Tissue-specific expression of distinct spectrin and ankyrin transcripts in erythroid and nonerythroid cells. 100:152.
— *See* Cox, Moon, and Lazarides.
— *See* Giebelhaus, Zelus, Henchman, and Moon.
Moor, H. *See* Hunziker, Herrmann, Schenk, Mueller, and Moor.
— *See* Studer, Moor, and Gross.
Moore, H.-P., Gumbiner, B., and Kelly, R. B. A subclass of proteins and sulfated macromolecules secreted by AtT-20 cells is sorted with adrenocorticotropin into dense secretory granules. 97:810.
Moore, H.-P. H., and Kelly, R. B. Secretory protein targeting in a pituitary cell line: differential transport of foreign secretory proteins to distinct secretory pathways. 101:1773.
— *See* Powell, Orci, Craik, and Moore.
— *See* Rivas and Moore.
Moore, I. *See* Foley, MacGregor, Kusel, Garland, Downie, and Moore.
Moore, J. P. *See* Beaven, Guthrie, Moore, Smith, Hesketh, and Metcalfe.
Moore, K. *See* Brown, Novak, Takeuchi, Moore, Medda, and Swank.
Moore, M. S. *See* Mahaffey, Moore, Brodsky, and Anderson.
Moore, S. E., Thompson, J., Kirkness, V., Dickson, J. G., and Walsh, F. S. Skeletal muscle neural cell adhesion molecule (N-CAM): changes in protein and mRNA species during myogenesis of muscle cell lines. 105:1377.
— *See* Doherty, Barton, Dickson, Seaton, Rowett, Moore, Gower, and Walsh.
Moore, W. S. *See* Snell, Clausell, and Moore.
— *See* Snell and Moore.
Moos, C. Fluorescence microscope study of the binding of added C protein to skeletal muscle myofibrils. 90:25.
Mooseker, M. *See* Garcia, Coudrier, Carboni, Anderson, Vandekerkhove, Mooseker, Louvard, and Arpin.
— *See* Pearl, Fishkind, Mooseker, Keene, and Keller.
Mooseker, M. S., and Coleman, T. R. The 110-kD protein–calmodulin complex of the intestinal microvillus (brush border myosin I) is a mechanoenzyme. 108:2395.
—, **Conzelman, K. A., Coleman, T. R., Heuser, J. E., and Sheetz, M. P.** Characterization of intestinal microvillar membrane disks: detergent-resistant membrane sheets enriched in associated brush border myosin I (110K-calmodulin). 109:1153.
—, **Graves, T. A., Wharton, K. A., Falco, N., and Howe, C. L.** Regulation of microvillus structure: Calcium-dependent solation and cross-linking of actin filaments in the microvilli of intestinal epithelial cells. 87:809.
—, **Pollard, T. D., and Wharton, K. A.** Nucleated polymerization of actin from the membrane-associated ends of microvillar filaments in the intestinal brush border. 95:223.
—, **and Stephens, R. E.** Brush-border alpha-actinin? Comparison of two proteins of the microvillus core with alpha-actinin by two-dimensional peptide mapping. 86:466.
— *See* Anderson, Stevenson, Jesaitis, Goodenough, and Mooseker.
— *See* Anderson, Van Itallie, Peterson, Stevenson, Carew, and Mooseker.
— *See* Bonder and Mooseker.
— *See* Carboni, Conzelman, Adams, Kaiser, Pollard, and Mooseker.
— *See* Coleman, Harris, Miche, Mooseker, and Morrow.
— *See* Coleman and Mooseker.
— *See* Conzelman and Mooseker.
— *See* Hirokawa, Keller, Chasan, and Mooseker.
— *See* Howe and Mooseker.
— *See* Howe, Mooseker, and Graves.
— *See* Howe, Sacramone, Mooseker, and Morrow.
— *See* Keller and Mooseker.
— *See* Keller, Conzelman, Chasan, and Mooseker.
— *See* Mische, Mooseker, and Morrow.
— *See* Pollard and Mooseker.
— *See* Shibayama, Carboni, and Mooseker.
— *See* Stevenson, Anderson, Goodenough, and Mooseker.
— *See* Stevenson, Siliciano, Mooseker, and Goodenough.
— *See* Tilney, Bonder, Coluccio, and Mooseker.
Morale, D. *See* Carraro, Morale, Mussini, Lucke, Cantini, Betto, Catani, Dalla Libera, Betto, and Noventa.
Morales, E. A. *See* Spray, Ginzberg, Morales, Gatmaitan, and Arias.
Morales, M. F. *See* Fry and Morales.
Moran, M. N. *See* Noe and Moran.
Moreau, N., Angelier, N., Bonnanfant-Jais, M.-L., Gounon, P., and Kubisz, P. Association of nucleoplasmin with transcription products as revealed by immunolocalization in the amphibian oocyte. 103:683.
Morejohn, L. C., and Fosket, D. E. Taxol-induced rose microtubule polymerization in vitro and its inhibition by colchicine. 99:141.
Morel, N., Manaranche, R., Israël, M., and Gulik-Krzywicki, T. Isolation of a presynaptic plasma membrane fraction from *Torpedo* cholinergic synaptosomes: evidence for a specific protein. 93:349.
—, **Marsal, J., Manaranche, R., Lazereg, S., Mazie, J. C., and Israel, M.** Large-scale purification of presynaptic plasma membranes from *Torpedo marmorata* electric organ. 101:1757.
—, **Thieffry, M., and Manaranche, R.** Binding of a *Glycera convoluta* neurotoxin to cholinergic nerve terminal plasma membranes. 97:1737.
Morell, P. *See* Blaker, Goodrum, and Morell.
— *See* DesJardins and Morell.
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Moreton, R. B. *See* Cheek, Jackson, O'Sullivan, Moreton, Berridge, and Burgoyne.
Moretta, L. *See* Azzarone, Suarez, Mingari, Moretta, and Fauci.
Moretti, M. *See* De Camilli, Moretti, Donini, Walter, and Lohmann.

Morgan, D. A., and Brodsky, I. Novel peripheral blood-derived human cell lines with properties of megakaryocytes. 100:565.
Morgan, L. *See* Jessen, Morgan, Brammer, and Mirsky.
Morgan, M. *See* Ash, Fineman, Kalka, Morgan, and Wire.
Mori, H., and Christensen, A. K. Morphometric analysis of Leydig cells in the normal rat testis. 84:340.
— *See* Kanai, Takemura, Oshima, Mori, Ihara, Yanagisawa, Masaki, and Hirokawa.
— *See* Yumura, Mori, and Fukui.
Morimoto, K. *See* Tsukita, Tsukita, Ishikawa, Kurokawa, Morimoto, Sobue, and Kakiuchi.
Morimoto, R., and Fodor, E. Cell-specific expression of heat shock proteins in chicken reticulocytes and lymphocytes. 99:1316.
Morimoto, R. I. *See* Milarski, Welch, and Morimoto.
— *See* Milarski and Morimoto.
Morimoto, T. *See* Sabatini, Kreibich, Morimoto, and Adesnik.
Morisset, M. *See* Capony, Morisset, Barrett, Capony, Broquet, Vignon, Chambon, Louisot, and Rochefort.
Morita, H. *See* Hanai, Kato, Matsuhashi, Morita, Raines, and Ross.
Moro, G. *See* Castagnola, Dozin, Moro, and Cancedda.
— *See* Castagnola, Moro, Descalzi-Cancedda, and Cancedda.
Moro, L. *See* de Bernard, Bianco, Bonucci, Costantini, Lunazzi, Martinuzzi, Modricky, Moro, Panfili, Pollesello, Stagni, and Vittur.
Moroi, Y., Hartman, A. L., Nakane, P. K., and Tan, E. M. Distribution of kinetochore (centromere) antigen in mammalian cell nuclei. 90:254.
Morris, J. *See* Griffin, Price, Drachman, and Morris.
Morris, J. R., and Lasek, R. J. Monomer-polymer equilibria in the axon: direct measurement of tubulin and actin as polymer and monomer in axoplasm. 98:2064.
—, and Lasek, R. J. Stable polymers of the axonal cytoskeleton: the axoplasmic ghost. 92:92.
Morris, L., Crocker, P. R., and Gordon, S. Murine fetal liver macrophages bind developing erythroblasts by a divalent cation–dependent hemagglutinin. 106:649.
Morris, N. P. *See* Keene, Sakai, Lunstrum, Morris, and Burgeson.
— *See* Sakai, Keene, Morris, and Burgeson.
Morris, N. R. *See* Gambino, Bergen, and Morris.
— *See* May, Gambino, Weatherbee, and Morris.
— *See* Oakley and Morris.
— *See* Osmani, May, and Morris.
— *See* Weatherbee, May, Gambino, and Morris.
Morris, R. E. *See* Gelman, Davis, Morris, and Gruenstein.
Morris, S. J. *See* Sarkar, Morris, Eidelman, Zimmerberg, and Blumenthal.
Morrison, T. *See* Wilson, Connolly, Morrison, and Gilmore.
Morrissey, J. H. *See* Drake, Ruf, Morrissey, and Edgington.
Morrow, J. S., Cianci, C. D., Ardito, T., Mann, A. S., and Kashgarian, M. Ankyrin links fodrin to the alpha subunit of Na, K-ATPase in Madin–Darby canine kidney cells and in intact renal tubule cells. 108:455.
—, and Marchesi, V. T. Self-assembly of spectrin oligomers in vitro: A basis for a dynamic cytoskeleton. 88:463.
— *See* Bloch and Morrow.
— *See* Coleman, Harris, Miche, Mooseker, and Morrow.
— *See* Howe, Sacramone, Mooseker, and Morrow.
— *See* Mische, Mooseker, and Morrow.
— *See* Petrucci and Morrow.
Mörschel, E., and Staehelin, L. A. Reconstitution of cytochrome f/b_6 and CF_0-CF_1 ATP synthetase complexes into phospholipid and galactolipid liposomes. 97:301.
Morser, J. *See* Colman, Morser, Lane, Besley, Wylie, and Valle.
Morstad, A. L. *See* Godfrey, Dietz, Morstad, Wallskog, and Yorde.
Mortensen, R. M. *See* Rachubinski, Fujiki, Mortensen, and Lazarow.
Moscatelli, D. Metabolism of receptor-bound and matrix-bound basic fibroblast growth factor by bovine capillary endothelial cells. 107:753.
—, and Quarto, N. Transformation of NIH 3T3 cells with basic fibroblast growth factor or the hst/K-*fgf* oncogene causes downregulation of the fibroblast growth factor receptor: reversal of morphological transformation and restoration of receptor number by suramin. 109:2519.
— *See* Gross, Moscatelli, Jaffe, and Rifkin.
— *See* Rifkin and Moscatelli.
— *See* Saksela, Moscatelli, and Rifkin.
— *See* Saksela, Moscatelli, Sommer, and Rifkin.
Moseley, J. M. *See* Steere, Erbe, and Moseley.
Moser, A. B. *See* Arias, Moser, and Goldfischer.
Moser, H. *See* Wallimann, Walzthöny, Wegmann, Moser, Eppenberger, and Barrantes.
Moses, H. L. *See* Keski-Oja, Blasi, Leof, and Moses.
— *See* Lyons, Keski-Oja, and Moses.
Mosesson, M. W. *See* Tooney, Mosesson, Amrani, Hainfield, and Wall.
Moshage, H. J. *See* Pieper, Schaart, Krimpenfort, Henderik, Moshage, van de Kemp, Ramaekers, Berns, and Bloemendal.
Mosher, D. F., Doyle, M. J., and Jaffe, E. A. Synthesis and secretion of thrombospondin by cultured human endothelial cells. 93:343.
— *See* McKeown-Longo, Hanning, and Mosher.
— *See* McKeown-Longo and Mosher.
— *See* Murphy-Ullrich and Mosher.
— *See* Pesciotta Peters and Mosher.
Moss, D. J. *See* Ranscht, Moss, and Thomas.
Moss, J. *See* Spiegel, Yamada, Hom, Moss, and Fishman.
Moss, L. *See* Parry, Cullen, Kaetzel, Kramer, and Moss.
Moss, P. *See* Radke, Carter, Moss, Dehazya, Schliwa, and Martin.
Moss, R. L., Giulian, G. G., and Greaser, M. L. Effects of EDTA treatment upon the protein subunit composition and mechanical properties of mammalian single skeletal muscle fibers. 96:970.
Moss, S. B. *See* Ierardi, Moss, and Bellvé.
Mossaz, A. *See* Montesano, Mossaz, Ryser, Orci, and Vassalli.
— *See* Montesano, Mossaz, Vassalli, and Orci.
Mostov, K. E., Brietfeld, P., and Harris, J. M. An anchor-minus form of the polymeric immunoglobulin receptor is secreted predominantly apically in Madin–Darby canine kidney cells. 105:2031.
— *See* Breitfeld, Harris, and Mostov.
— *See* Deitcher, Neutra, and Mostov.
Mott, M. R. *See* Hill, Mott, Burnett, Abmayr, Lowenhaupt, and Elgin.
Mottola, C., and Romeo, D. Calcium movement and membrane potential changes in the early phases of neutrophil activation by phorbol myristate acetate: a study with ion-selective electrodes. 93:129.
Mouron, P. *See* Montesano, Mouron, Amherdt, and Orci.
Moutsatsos, I. K., Davis, J. M., and Wang, J. L. Endogenous lectins from cultured cells: subcellular localization of carbohydrate-binding protein 35 in 3T3 fibroblasts. 102:477.
Moy, G. W. *See* Kopf, Moy, and Vacquier.
— *See* Vacquier, Moy, Trimmer, Ebina, and Porter.
— *See* Ward, Moy, and Vacquier.
Moya, M., Dautry-Varsat, A., Goud, B., Louvard, D., and Boquet, P. Inhibition of coated pit formation in HEP_2 cells blocks the cytotoxicity of diphtheria toxin but not that of ricin toxin. 101:548.
Mroczkowski, B., Dym, H. P., Siegel, E. J., and Heywood, S. M. Uptake and utilization of mRNA by myogenic cells in culture. 87:65.
Mrsny, R. J., and Meizel, S. Potassium ion influx and Na+, K+-ATPase activity are required for the hamster sperm acrosome reaction. 91:77.
Mueckler, M. M., and Pitot, H. C. Structure and function of rat liver polysome populations. I. Complexity, frequency distribution, and degree of uniqueness of free and membrane-bound polysomal polyadenylate-containing RNA populations. 90:495.
—, and Pitot, H. C. Structure and function of rat liver polysome populations. II. Characterization of polyadenylate-containing mRNA associated with subpopulations of membrane-bound polysomes and messenger ribonucleoprotein particles. 94:297.
Muellener, D. *See* Bolender, Paumgartner, Muellener, Losa, and Weibel.
Mueller, M. *See* Hunziker, Herrmann, Schenk, Mueller, and Moor.
Mueller, S. C., and Branton, D. Identification of coated vesicles in *Saccharomyces cerevisiae*. 98:341.
—, and Brown, R. M., Jr. Evidence for an intramembrane component associated with a cellulose microfibril-synthesizing complex in higher plants. 84:315.
—, and Hubbard, A. L. Receptor-mediated endocytosis of asialoglycoproteins by rat hepatocytes: receptor-positive and receptor-negative endosomes. 102:932.
—, Kelly, T., Dai, M., Dai, H., and Chen, W.-T. Dynamic cytoskeleton–integrin associations induced by cell binding to immobilized fibronectin. 109:3455.
— *See* Chen, Chen, and Mueller.
Mugnai, G., Lewandowska, K., Carnemolla, B., Zardi, L., and Culp, L. A. Modulation of matrix adhesive responses of human neuroblastoma cells by neighboring sequences in the fibronectins. 106:931.
Mugrauer, G., Alt, F. W., and Ekblom, P. *N-myc* proto-oncogene expression during organogenesis in the developing mouse as revealed by in situ hybridization. 107:1325.
Muir, D., Engvall, E., Varon, S., and Manthorpe, M. Schwannoma cell–derived inhibitor of the neurite-promoting activity of laminin. 109:2353.
Mujoo, K. *See* Cheresh, Pierschbacher, Herzig, and Mujoo.
Mukherjee, T. K. *See* Banerjee, Mukherjee, and Redman.
Mulders, J. W. M. *See* de Jong, Hoekman, Mulders, and Bloemendal.
Muller, D. E. *See* Zimmermann, Schaer, Muller, Schneider, Miodonski-Maculewicz, and Schindler.
Müller, G. *See* Steffen, Fuge, Dietz, Bastmeyer, and Müller.
Müller, H. W., Ignatius, M. J., Hangen, D. H., and Shooter, E. M. Expression of specific sheath cell proteins during peripheral nerve growth

and regeneration in mammals. 102:393.
Muller, J., Kachadorian, W. A., and DiScala, V. A. Evidence that ADH-stimulated intramembrane particle aggregates are transferred from cytoplasmic to luminal membranes in toad bladder epithelial cells. 85:83.
— *See* Kachadorian, Muller, and Finkelstein.
— *See* Rapoport, Kachadorian, Muller, Franki, and Hays.
Muller, M. *See* Ahrem, Hoffschulte, and Muller.
Müller, M. *See* Mandelkow, Schultheiss, Rapp, Müller, and Mandelkow.
Muller, P. *See* Busson-Mabillot, Chambaut-Guérin, Ovtracht, Muller, and Rossignol.
Muller, W. A., and Gimbrone, M. A., Jr. Plasmalemmal proteins of cultured vascular endothelial cells exhibit apical–basal polarity: analysis by surface-selective iodination. 103:2389.
—, **Steinman, R. M., and Cohn, Z. A.** The membrane proteins of the vacuolar system. I. Analysis by a novel method of intralysosomal iodination. 86:292.
—, **Steinman, R. M., and Cohn, Z. A.** The membrane proteins of the vacuolar system. II. Bidirectional flow between secondary lysosomes and plasma membrane. 86:304.
—, **Steinman, R. M., and Cohn, Z. A.** The membrane proteins of the vacuolar system. III. Further studies on the composition and recycling of endocytic vacuole membrane in cultured macrophages. 96:29.
— *See* Steinman, Mellman, Muller, and Cohn.
Müller, W. E. G. *See* Gramzow, Bachmann, Uhlenbruck, Dorn, and Müller.
Müller-Glauser, W., Humbel, B., Glatt, M., Sträuli, P., Winterhalter, K. H., and Bruckner, P. On the role of type IX collagen in the extracellular matrix of cartilage: type IX collagen is localized to intersections of collagen fibrils. 102:1931.
Mullet, J. E. *See* Klein, Mason, and Mullet.
Mullikin, W. H. *See* Leven, Mullikin, and Nachmias.
Mullins, J. M., and McIntosh, J. R. Isolation and initial characterization of the mammalian midbody. 94:654.
Mullock, B. M., Branch, W. J., van Schaik, M., Gilbert, L. K., and Luzio, J. P. Reconstitution of an endosome–lysosome interaction in a cell-free system. 108:2093.
Mulroy, M. J. *See* Tilney, DeRosier, and Mulroy.
Mulvihill, E. R. *See* Shepherd, Mulvihill, Thomas, and Palmiter.
Mumby, S. M., Raugi, G. J., and Bornstein, P. Interactions of thrombospondin with extracellular matrix proteins: selective binding to type V collagen. 98:646.
— *See* Raugi, Mumby, Abbott-Brown, and Bornstein.
Mumford, R. A. *See* Singer, Kawka, Scott, Mumford, and Lark.
Munaut, C. *See* Matagne, Michel-Wolvertz, Munaut, Duyckaerts, and Sluse.
Mundy, G. R. *See* Ibbotson, Roodman, McManus, and Mundy.
Munoz, E. F. *See* Heine, Munoz, Flanders, Ellingsworth, Lam, Thompson, Roberts, and Sporn.
Munoz, J. J. *See* Becker, Kermode, Naccache, Yassin, Marsh, Munoz, and Sha'afi.
Munson, R., Jr., Caldwell, K. L., and Glaser, L. Multiple controls for the synthesis of muscle-specific proteins in BC_3H1 cells. 92:350.
Mura, C. V. *See* Di Padua Mathieu, Mura, Frado, Woodcock, and Stollar.
Murakami, H., Pain, D., and Blobel, G. 70-kD heat shock–related protein is one of at least two distinct cytosolic factors stimulating protein import into mitochondria. 107:2051.
Muramatsu, M. *See* Nakano and Muramatsu.
Murawsky, M. *See* Daniloff, Crossin, Pinçon-Raymond, Murawsky, Rieger, and Edelman.
— *See* Rieger, Nicolet, Pinçon-Raymond, Murawsky, Levi, and Edelman.
Murnane, A. A. *See* Froehner, Murnane, Tobler, Peng, and Sealock.
Muro, Y. *See* Masumoto, Masukata, Muro, Nozaki, and Okazaki.
Murofushi, H., Kotani, S., Aizawa, H., Hisanaga, S., Hirokawa, N., and Sakai, H. Purification and characterization of a 190-kD microtubule-associated protein from bovine adrenal cortex. 103:1911.
— *See* Ishiguro, Murofushi, and Sakai.
Murphy, D. B. Identification of microtubule-associated proteins in the meiotic spindle of surf clam oocytes. 84:235.
—, **Grasser, W. A., and Wallis, K. T.** Immunofluorescence examination of beta tubulin expression and marginal band formation in developing chicken erythroblasts. 102:628.
—, **Gray, R. O., Grasser, W. A., and Pollard, T. D.** Direct demonstration of actin filament annealing in vitro. 106:1947.
—, **Hiebsch, R. R., and Wallis, K. T.** Identity and origin of the ATPase activity associated with neuronal microtubules I. The ATPase activity is associated with membrane vesicles. 96:1298.
—, **Wallis, K. T., and Hiebsch, R. R.** Identity and origin of the ATPase activity associated with neuronal microtubules. II. Identification of a 50,000-dalton polypeptide with ATPase activity similar to f-1 ATPase from mitochondria. 96:1306.
— *See* Gottlieb and Murphy.
— *See* Kuznetsov, Rodionov, Nadezhdina, Murphy, and Gelfand.
— *See* Rothwell, Grasser, Baker, and Murphy.
— *See* Rothwell, Grasser, and Murphy.
Murphy, G. *See* Werb, Hembry, Murphy, and Aggeler.
Murphy, R. A. *See* Siminoski, Gonnella, Bernanke, Owen, Neutra, and Murphy.
Murphy, R. F., Powers, S., and Cantor, C. R. Endosome pH measured in single cells by dual fluorescence flow cytometry: rapid acidification of insulin to pH 6. 98:1757.
— *See* Cain and Murphy.
— *See* McNeil, Murphy, Lanni, and Taylor.
— *See* Preston, Murphy, and Jones.
Murphy, T. L., Decker, G., and August, J. T. Glycoproteins of coated pits, cell junctions, and the entire cell surface revealed by monoclonal antibodies and immunoelectron microscopy. 97:533.
— *See* Chen, Murphy, Willingham, Pastan, and August.
— *See* Jacobson, O'Dell, Holifield, Murphy, and August.
Murphy-Erdosh, C. *See* Gu, Ralston, Murphy-Erdosh, Black, and Hall.
Murphy-Ullrich, J. E., and Höök, M. Thrombospondin modulates focal adhesions in endothelial cells. 109:1309.
—, **and Mosher, D. F.** Interactions of thrombospondin with endothelial cells: receptor-mediated binding and degradation. 105:1603.
Murray, B. A., Hemperly, J. J., Prediger, E. A., Edelman, G. M., and Cunningham, B. A. Alternatively spliced mRNAs code for different polypeptide chains of the chicken neural cell adhesion molecule (N-CAM). 102:189.
—, **Owens, G. C., Prediger, E. A., Crossin, K. L., Cunningham, B. A., and Edelman, G. M.** Cell surface modulation of the neural cell adhesion molecule resulting from alternative mRNA splicing in a tissue-specific developmental sequence. 103:1431.
Murray, J. *See* Lin, Holtzer, Schultheiss, Murray, Masaki, Fischman, and Holtzer.
Murray, J. M. Disassembly and reconstitution of a membrane-microtubule complex. 98:1481.
— Three-dimensional structure of a membrane-microtubule complex. 98:283.
Murray, S. A., and Fletcher, W. H. Hormone-induced intercellular signal transfer dissociates cAMP-dependent protein kinase. 98:1710.
Murtaugh, M. P., Steiner, A. L., and Davies, P. J. A. Localization of the catalytic subunit of cyclic AMP-dependent protein kinase in cultured cells using a specific antibody. 95:64.
Murthy, U., Basu, M., Sen-Majumdar, A., and Das, M. Perinuclear location and recycling of epidermal growth factor receptor kinase: immunofluorescent visualization using antibodies directed to kinase and extracellular domains. 103:333.
Murti, K. G., and Goorha, R. Interaction of frog virus-3 with the cytoskeleton. I. Altered organization of microtubules, intermediate filaments, and microfilaments. 96:1248.
Muscarella, D. E., Vogt, V. M., and Bloom, S. E. Characterization of ribosomal RNA synthesis in a gene dosage mutant: the relationship of topoisomerase I and chromatin structure to transcriptional activity. 105:1501.
—, **Vogt, V. M., and Bloom, S. E.** The ribosomal RNA gene cluster in aneuploid chickens: evidence for increased gene dosage and regulation of gene expression. 101:1749.
Muscatine, L. *See* Hohman, McNeil, and Muscatine.
Musgrave, A. *See* Homan, Musgrave, de Nobel, Wagter, de Wit, Kolk, and van den Ende.
— *See* Kooijman, de Wildt, Beumer, van der Vliet, Homan, Kalshoven, Musgrave, and van den Ende.
Musil, L. S., and Baenziger, J. U. Cleavage of membrane secretory component to soluble secretory component occurs on the cell surface of rat hepatocyte monolayers. 104:1725.
—, **Carr, C., Cohen, J. B., and Merlie, J. P.** Acetylcholine receptor–associated 43K protein contains covalently bound myristate. 107:1113.
—, **Frail, D. E., and Merlie, J. P.** The mammalian 43-kD acetylcholine receptor–associated protein (RAPsyn) is expressed in some nonmuscle cells. 108:1833.
Mussini, I. *See* Carraro, Morale, Mussini, Lucke, Cantini, Betto, Catani, Dalla Libera, Betto, and Noventa.
Mustoe, T. A. *See* Pierce, Mustoe, Lingelbach, Masakowski, Griffin, Senior, and Deuel.
Muthukrishnan, L. *See* McNeil, Muthukrishnan, Warder, and D'Amore.
Myers, A. M. *See* Schmidt, Myers, Gillham, and Boynton.
Myers, S. L. *See* Fife, Caterson, and Myers.
Myint, H. *See* Broughton, Wong, Lewin, Samrey, Myint, Meyer, Dowling, and Simon.
Myles, D. G., and Primakoff, P. Localized surface antigens of guinea pig sperm migrate to new regions prior to fertilization. 99:1634.

—, **Primakoff, P., and Koppel, D. E.** A localized surface protein of Guinea pig sperm exhibits free diffusion in its domain. 98:1905.
— *See* Cowan, Myles, and Koppel.
— *See* Cowan, Primakoff, and Myles.
— *See* Primakoff, Hyatt, and Myles.
Myllylä, R. *See* Alitalo, Kuismanen, Myllylä, Kiistala, Asko-Seljavaara, and Vaheri.
Myrdal, S. E., and Auersperg, N. An agent or agents produced by virus-transformed cells cause unregulated ruffling in untransformed cells. 102:1224.
—, **Twardzik, D. R., and Auersperg, N.** Cell-mediated co-action of transforming growth factors: incubation of type β with normal rat kidney cells produces a soluble activity that prolongs the ruffling response to type α. 102:1230.

N

Nabel, G. *See* Galli, Dvorak, Marcum, Ishizaka, Nabel, Der Simonian, Pyne, Goldin, Rosenberg, Cantor, and Dvorak.
Naccache, P. H. *See* Becker, Kermode, Naccache, Yassin, Marsh, Munoz, and Sha'afi.
— *See* Sha'afi, Shefcyk, Yassin, Molski, Volpi, Naccache, White, Feinstein, and Becker.
— *See* Therrien and Naccache.
— *See* Yassin, Shefcyk, White, Tao, Volpi, Molski, Naccache, Feinstein, and Sha'afi.
Nachmias, V. T. Cytoskeleton of human platelets at rest and after spreading. 86:795.
— Hybrids of *Physarum* myosin light chains and desensitized scallop myofibrils. 90:408.
—, **Yoshida, K., and Glennon, M. C.** Lowering pH in blood platelets dissociates myosin phosphorylation from shape change and myosin association with the cytoskeleton. 105:1761.
— *See* Antin, Tokunaka, Nachmias, and Holtzer.
— *See* Dlugosz, Antin, Nachmias, and Holtzer.
— *See* Fallon and Nachmias.
— *See* Gonnella and Nachmias.
— *See* Leven, Mullikin, and Nachmias.
— *See* Leven and Nachmias.
— *See* Philp and Nachmias.
Nadal-Ginard, B. *See* Herrera, Emanuel, Ruiz-Opazo, Levenson, and Nadal-Ginard.
— *See* Narusawa, Fitzsimons, Izumo, Nadal-Ginard, Rubinstein, and Kelly.
— *See* Taubman, Grant, and Nadal-Ginard.
— *See* Taubman, Smith, Izumo, Grant, Endo, Andreadis, and Nadal-Ginard.
— *See* Wieczorek, Periasamy, Butler-Browne, Whalen, and Nadal-Ginard.
Nadezhdina, E. S. *See* Kuznetsov, Rodionov, Nadezhdina, Murphy, and Gelfand.
Nadin, C. Y., Rogers, J., Tomlinson, S., and Edwardson, J. M. A specific interaction in vitro between pancreatic zymogen granules and plasma membranes: stimulation by G-protein activators but not by Ca^{2+} 109:2801.
Naemura, J. R. *See* Jesaitis, Naemura, Sklar, Cochrane, and Painter.
Naftilan, J. *See* Ouellette, Greco, James, Frederick, Naftilan, and Fallon.
Nagafuchi, A. *See* Hatta, Nose, Nagafuchi, and Takeichi.
Nagata, K., Humphries, M. J., Olden, K., and Yamada, K. M. Collagen can modulate cell interactions with fibronectin. 101:386.
—, **Saga, S., and Yamada, K. M.** A major collagen-binding protein of chick embryo fibroblasts is a novel heat shock protein. 103:223.
—, **Sagara, J., and Ichikawa, Y.** Changes in contractile proteins during differentiation of myeloid leukemia cells. I. Polymerization of actin. 85:273.
—, **Sagara, J., and Ichikawa, Y.** Changes in contractile proteins during differentiation of myeloid leukemia cells. II. Purification and characterization of actin. 93:470.
— *See* Saga, Nagata, Chen, and Yamada.
Nagata, M. *See* Burnside, Smith, Nagata, and Porrello.
Nagata, Y., Rosen, O. M., Makman, M. H., and Bloom, B. R. Biochemical analysis of mutants of a macrophage cell line resistant to the growth-inhibitory activity of interferon. 98:1342.
Nagayama, S. N. *See* Brokaw and Nagayama.
Nagelkerke, J. F. *See* Amar-Costesec, Prado-Figueroa, Beaufay, Nagelkerke, and van Berkel.
Nagpal, M. L. *See* Bourguignon, Nagpal, Balazovich, Guerriero, and Means.
— *See* Bourguignon, Nagpal, and Hsing.
— *See* Bourguignon, Suchard, Nagpal, and Glenney.
Nagy, M., Laporte, J., Penverne, B., and Hervé, G. Nuclear localization of aspartate transcarbamoylase in *Saccharomyces cerevisiae*. 92:790.
Nakache, M. *See* Picker, Nakache, and Butcher.
Nakada, H. *See* Matsuura, Nakada, Sawamura, and Tashiro.
Nakagawa, S. *See* Nishida, Nakagawa, Awata, Ohashi, Watanabe, and Manabe.
Nakajima, S. *See* Bridgman, Nakajima, Greenberg, and Nakajima.
Nakajima, Y., and Bridgman, P. C. Absence of filipin-sterol complexes from the membranes of active zones and acetylcholine receptor aggregates at frog neuromuscular junctions. 88:453.
— *See* Bridgman and Nakajima.
— *See* Bridgman, Nakajima, Greenberg, and Nakajima.
Nakamura, S., and Tamm, S. L. Calcium control of ciliary reversal in ionophore-treated and ATP-reactivated comb plates of ctenophores. 100:1447.
— *See* Hiramoto, Hamaguchi, Shoji, Schroeder, Shimoda, and Nakamura.
Nakamura, T. *See* Schliwa, Nakamura, Porter, and Euteneuer.
Nakane, P. K. *See* Levine, Nakane, and Allen.
— *See* Moroi, Hartman, Nakane, and Tan.
Nakanishi, M. *See* Kaneda, Uchida, Mekada, Nakanishi, and Okada.
Nakano, A., Brada, D., and Schekman, R. A membrane glycoprotein, Sec12p, required for protein transport from the endoplasmic reticulum to the Golgi apparatus in yeast. 107:851.
—, **and Muramatsu, M.** A novel GTP-binding protein, Sar1p, is involved in transport from the endoplasmic reticulum to the Golgi apparatus. 109:2677.
Nakao, M. *See* Tsukita, Tsukita, Ishikawa, Sato, and Nakao.
Nakata, T., and Hirokawa, N. Cytoskeletal reorganization of human platelets after stimulation revealed by the quick-freeze deep-etch technique. 105:1771.
Nakayama, T. *See* Sato, Nishizawa, Nakayama, and Kobayashi.
Nakayasu, H., and Berezney, R. Mapping replicational sites in the eucaryotic cell nucleus. 108:1.
Nakeff, A. *See* Ryo, Nakeff, Huang, Ginsberg, and Deuel.
Naldini, L. *See* Marchisio, Cirillo, Naldini, Primavera, Teti, and Zamboni-Zallone.
Namba, M. *See* Matuoka, Namba, and Mitsui.
Nandini-Kishore, S. G., and Thompson, G. A., Jr. Evidence for a pronounced secretion of cyclic AMP by *Tetrahymena*. 85:910.
Napolitano, E. W., Pachter, J. S., Chin, S. S. M., and Liem, R. K. H. β-Internexin, a ubiquitous intermediate filament-associated protein. 101:1323.
Naprstek, B. L. *See* Furie, Cramer, Naprstek, and Silverstein.
Narayanswami, S. *See* Lica, Narayanswami, and Hamkalo.
Narusawa, M., Fitzsimons, R. B., Izumo, S., Nadal-Ginard, B., Rubinstein, N. A., and Kelly, A. M. Slow myosin in developing rat skeletal muscle. 104:447.
Nash, M. A., Kozak, S. E., Angerer, L. M., Angerer, R. C., Schatten, H., Schatten, G., and Marzluff, W. F. Sea urchin maternal and embryonic U1 RNAs are spatially segregated in early embryos. 104:1133.
Nath, J., Flavin, M., and Gallin, J. I. Tubulin tyrosinolation in human polymorphonuclear leukocytes: studies in normal subjects and in patients with the Chediak-Higashi syndrome. 95:519.
—, **Flavin, M., and Schiffmann, E.** Stimulation of tubulin tyrosinolation in rabbit leukocytes evoked by the chemoattractant formyl-methionyl-leucyl-phenylalanine. 91:232.
— *See* Rothwell, Nath, and Wright.
Nathan, C., Srimal, S., Farber, C., Sanchez, E., Kabbash, L., Asch, A., Gailit, J., and Wright, S. D. Cytokine-induced respiratory burst of human neutrophils: dependence on extracellular matrix proteins and CD11/CD18 integrins. 109:1341.
Nathan, D. G. *See* Frantz, Nathan, and Scher.
Nathanson, M. A. *See* Vanderburg and Nathanson.
Natori, R. *See* Maruyama, Yoshioka, Higuchi, Ohashi, Kimura, and Natori.
Natori, S. *See* Yahara, Harada, Sekita, Yoshihira, and Natori.
Natowicz, M., Hallett, D. W., Frier, C., Chi, M., Schlesinger, P. H., and Baenziger, J. U. Recognition and receptor-mediated uptake of phosphorylated high mannose-type oligosaccharides by cultured human fibroblasts. 96:915.
— *See* Fischer, Natowicz, Sly, and Bretthauer.
Naus, C. C. G. *See* Miller, Naus, Durand, Bloom, and Milner.
Nave, C. *See* Bordas, Mant, Diakun, and Nave.
Nave, R., Fürst, D. O., and Weber, K. Visualization of the polarity of isolated titin molecules: a single globular head on a long thin rod as the M band anchoring domain? 109:2177.
— *See* Fürst, Osborn, Nave, and Weber.
Navone, F., Di Gioia, G., Jahn, R., Browning, M., Greengard, P., and De Camilli, P. Microvesicles of the neurohypophysis are biochemically related to small synaptic vesicles of presynaptic nerve terminals. 109:3425.
—, **Jahn, R., Di Gioia, G., Stukenbrok, H., Greengard, P., and De**

Camilli, P. Protein p38: an integral membrane protein specific for small vesicles of neurons and neuroendocrine cells. 103:2511.
Navre, M., and Ringold, G. M. A growth factor repressible gene associated with protein kinase C-mediated inhibition of adipocyte differentiation. 107:279.
—, and Ringold, G. M. Differential effects of fibroblast growth factor and tumor promoters on the initiation and maintenance of adipocyte differentiation. 109:1857.
Nawroth, P. *See* Gajdusek, Carbon, Ross, Nawroth, and Stern.
— *See* Stern, Brett, Harris, and Nawroth.
Nawroth, P. P. *See* Brett, Steinberg, de Groot, Nawroth, and Stern.
Neale, E. A. *See* Brenneman, Neale, Foster, d'Autremont, and Westbrook.
— *See* Sonderegger, Fishman, Bokoum, Bauer, Neale, and Nelson.
Neefjes, J. J., Verkerk, J. M. H., Broxterman, H. J. G., van der Marel, G. A., van Boom, J. H., and Ploegh, H. L. Recycling glycoproteins do not return to the *cis*-Golgi. 107:79.
Neely, M. D., and Boekelheide, K. Sertoli cell processes have axoplasmic features: an ordered microtubule distribution and an abundant high molecular weight microtubule-associated protein (cytoplasmic dynein). 107:1767.
Neff, L. *See* Baron, Neff, Brown, Courtoy, Louvard, and Farquhar.
— *See* Baron, Neff, Louvard, and Courtoy.
Neff, N. T., Bourret, L., Miao, P., and Dice, J. F. Degradation of proteins microinjected into IMR-90 human diploid fibroblasts. 91:184.
—, Lowrey, C., Decker, C., Tovar, A., Damsky, C., Buck, C., and Horwitz, A. F. A monoclonal antibody detaches embryonic skeletal muscle from extracellular matrices. 95:654.
Negishi, M. *See* Matsuura, Masuda, Omori, Negishi, and Tashiro.
Negishi, S. *See* Ogawa, Negishi, and Obika.
Neighbors, B. *See* Leslie, Saxton, Mitchison, Neighbors, Salmon, and McIntosh.
Neighbors, B. W., Williams, R. C., Jr., and McIntosh, J. R. Localization of kinesin in cultured cells. 106:1193.
— *See* Olmsted, Stemple, Saxton, Neighbors, and McIntosh.
Neilson, E. G. *See* Haverty, Kelly, Hines, Amenta, Watanabe, Harper, Kefalides, and Neilson.
Nelson, B. C. *See* Goldmacher, Tinnel, and Nelson.
Nelson, D. L. *See* Adoutte, Ramanathan, Lewis, Dute, Ling, Kung, and Nelson.
— *See* Bonini and Nelson.
— *See* Eisenbach, Ramanathan, and Nelson.
— *See* Lewis and Nelson.
— *See* Ramanathan, Saimi, Peterson, Nelson, and Kung.
— *See* Rauh and Nelson.
Nelson, G. A., Andrews, M. L., and Karnovsky, M. J. Control of erythrocyte shape by calmodulin. 96:730.
—, Andrews, M. L., and Karnovsky, M. J. Participation of calmodulin in immunoglobulin capping. 95:771.
—, Roberts, T. M., and Ward, S. *Caenorhabditis elegans* spermatozoan locomotion: amoeboid movement with almost no actin. 92:121.
— *See* Ward, Argon, and Nelson.
Nelson, P. G. *See* Critchley, Nelson, Habig, and Fishman.
— *See* Sonderegger, Fishman, Bokoum, Bauer, Neale, and Nelson.
Nelson, R. S. *See* Sung, Nelson, and Silverstein.
Nelson, T., Harpster, M. H., Mayfield, S. P., and Taylor, W. C. Light-regulated gene expression during maize leaf development. 98:558.
Nelson, W. G., and Sun, T.-T. 50,000- and 58,000-dalton keratin classes as molecular markers for stratified squamous epithelia: cell culture studies. 97:244.
— *See* Woodcock-Mitchell, Eichner, Nelson, and Sun.
Nelson, W. J., Granger, B. L., and Lazarides, E. Avian lens spectrin: subunit composition compared with erythrocyte and brain spectrin. 97:1271.
—, and Hammerton, R. W. A membrane-cytoskeletal complex containing Na^+, K^+-ATPase, ankyrin, and fodrin in Madin-Darby canine kidney (MDCK) cells: implications for the biogenesis of epithelial cell polarity. 108:893.
—, and Lazarides, E. Posttranslational control of membrane-skeleton (ankyrin and αβ-spectrin) assembly in early myogenesis. 100:1726.
—, and Veshnock, P. J. Dynamics of membrane-skeleton (fodrin) organization during development of polarity in Madin-Darby canine kidney epithelial cells. 103:1751.
—, and Veshnock, P. J. Modulation of fodrin (membrane skeleton) stability by cell-cell contact in Madin-Darby canine kidney epithelial cells. 104:1527.
— *See* Pasdar and Nelson.
Nemhauser, I., Joseph-Silverstein, J., and Cohen, W. D. Centrioles as microtubule-organizing centers for marginal bands of molluscan erythrocytes. 96:979.
— *See* Cohen, Bartelt, Jaeger, Langford, and Nemhauser.
— *See* Cohen and Nemhauser.
Nerbonne, J. *See* Spray, Nerbonne, Campos de Carvalho, Harris, and Bennett.
Nervi, C. *See* Amado, Caporale, Nervi, Ceci, and Molinaro.
Nestler, J. E. *See* Paavola, Strauss, Boyd, and Nestler.
Netland, P. A. and Zetter, B. R. Metastatic potential of B16 melanoma cells after in vitro selection for organ-specific adherence. 101:720.
Neubauer, B. L., Chung, L. W. K., McCormick, K. A., Taguchi, O., Thompson, T. C., and Cunha, G. R. Epithelial-mesenchymal interactions in prostatic development. II. Biochemical observations of prostatic induction by urogenital sinus mesenchyme in epithelium of the adult rodent urinary bladder. 96:1671.
— *See* Cunha, Fujii, Neubauer, Shannon, Sawyer, and Reese.
Neufeld, E. J., Majerus, P. W, Krueger, C. M., and Saffitz, J. E. Uptake and subcellular distribution of [^{3}H]arachidonic acid in murine fibrosarcoma cells measured by electron microscope autoradiography. 101:573.
Neufield, G., Mitchell, R., Ponte, P., and Gospodarowicz, D. Expression of human basic fibroblast growth factor cDNA in baby hamster kidney-derived cells results in autonomous cell growth. 106:1385.
Neugebauer, K. M., Tomaselli, K. J., Lilien, J., and Reichardt, L. F. N-cadherin, NCAM, and integrins promote retinal neurite outgrowth on astrocytes in vitro. 107:1177.
— *See* Hall, Neugebauer, and Reichardt.
Neupert, W. *See* Pfaller, Steger, Rassow, Pfanner, and Neupert.
— *See* Rassow, Guiard, Wienhues, Herzog, Hartl, and Neupert.
— *See* Schmidt, Hennig, Zimmermann, and Neupert.
— *See* Schwaiger, Herzog, and Neupert.
Neutra, M. *See* Siminoski, Gonnella, Bernanke, Owen, Neutra, and Murphy.
Neutra, M. R. *See* Amerongen, Mack, Wilson, and Neutra.
— *See* Deitcher, Neutra, and Mostov.
— *See* Gonnella and Neutra.
— *See* Specian and Neutra.
— *See* Trahair, Neutra, and Gordon.
— *See* Weltzin, Lucia-Jandris, Michetti, Fields, Kraehenbuhl, and Neutra.
— *See* Wilson, Whitney, and Neutra.
Nevalainen, L. T. *See* Makarow and Nevalainen.
Nevins, J. *See* Kaczmarek, Calabretta, Kao, Heintz, Nevins, and Baserga.
— *See* Salditt-Georgieff, Harpold, Sawicki, Nevins, and Darnell.
Newball, H. H. *See* Dvorak, Hammel, Schulman, Peters, MacGlashan, Schleimer, Newball, Pyne, Dvorak, Lichtenstein, and Galli.
Newburger, P. E., Pagano, J. S., Greenberger, J. S., Karpas, A., and Cohen, H. J. Dissociation of opsonized particle phagocytosis and respiratory burst activity in an Epstein-Barr virus-infected myeloid cell line. 85:549.
Newby, R. F. *See* Dean, Newby, and Bourgeois.
Newman, A. P., and Ferro-Novick, S. Characterization of new mutants in the early part of the yeast secretory pathway isolated by a [^{3}H]mannose suicide selection. 105:1587.
Newman, A. S. *See* Steinberg, Newman, Swanson, and Silverstein.
Newman, P. J., Kahn, R. A., and Hines, A. Detection and characterization of monoclonal antibodies to platelet membrane proteins. 90:249.
—, Kawai, Y., Montgomery, R. R., and Kunicki, T. J. Synthesis by cultured human umbilical vein endothelial cells of two proteins structurally and immunologically related to platelet membrane glycoproteins IIb and IIIa. 103:81.
— *See* Okita, Pidard, Newman, Montgomery, and Kunicki.
Newmeyer, D. D., Finlay, D. R., and Forbes, D. J. In vitro transport of a fluorescent nuclear protein and exclusion of non-nuclear proteins. 103:2091.
— *See* Finlay, Newmeyer, Price, and Forbes.
Newport, J. *See* Karsenti, Newport, Hubble, and Kirschner.
— *See* Miake-Lye, Newport, and Kirschner.
— *See* Wilson and Newport.
Newport, J. W. *See* Dunphy and Newport.
Ng, D. T. W., Randall, R. E., and Lamb, R. A. Intracellular maturation and transport of the SV5 type II glycoprotein hemagglutininneuraminidase: specific and transient association with GRP78-BiP in the endoplasmic reticulum and extensive internalization from the cell surface. 109:3273.
Ng, M. *See* Matus, Ng, Pehling, Ackerann, and Hauser.
Ngai, J., Capetanaki, Y. G., and Lazarides, E. Differentiation of murine erythroleukemia cells results in the rapid repression of vimentin gene expression. 99:306.
— *See* Moon, Ngai, Wold, and Lazarides.
Nghiêm, H.-O. *See* Kordeli, Cartaud, Nghiêm, Devillers-Thiéry, and Changeux.
— *See* Kordeli, Cartaud, Nghiêm, Pradel, Dubreuil, Paulin, and Changeux.

Nguyen, C., Mattei, M.-G., Mattei, J.-F,. Santoni, M.-J., Goridis, C., and Jordan, B. R. Localization of the human NCAM gene to band q23 of chromosome 11: the third gene coding for a cell interaction molecule mapped to the distal portion of the long arm of chromosome 11. 102:711.

Nguyen, H. *See* Jalkanen, Nguyen, Rapraeger, Kurn, and Bernfield.

Nguyen, M., Argan, C., Sheffield, W. P., Bell, A. W., Shields, D., and Shore, G. C. A signal sequence domain essential for processing, but not import, of mitochondrial pre-ornithine carbamyl transferase. 104:1193.

—, Bell, A. W., and Shore, G. C. Protein sorting between mitochondrial membranes specified by position of the stop-transfer domain. 106:1499.

Nguyen, T. *See* Bowen, Nguyen, and Lasky.

Ng Ying Kin, N. M. K. *See* Paiement, Rachubinski, Ng Ying Kin, Sikstrom, and Bergeron.

Nicchitta, C. V., and Blobel, G. Nascent secretory chain binding and translocation are distinct processes: differentiation by chemical alkylation. 108:789.

Nichols, K. M., Jacklet, A., and Rikmenspoel, R. Effects of Mg^{2+} and Ca^{2+} on photoinduced *Euglena* flagellar responses. 84:355.

Nicholson, B. *See* Zhang and Nicholson.

Nicholson, N. B., Chen, S., Blanck, G., and Pollack, R. SV40 transformation of Swiss 3T3 cells can cause a stable reduction in the calcium requirement for growth. 99:2314.

Nickells, R. W., and Browder, L. W. A role for glyceraldehyde-3-phosphate dehydrogenase in the development of thermotolerance in *Xenopus laevis* embryos. 107:1901.

—, Cavey, M. J., and Browder, L. W. The effects of heat shock on the morphology and protein synthesis of the epidermis of *Xenopus laevis* larvae. 106:905.

Nicklas, R. B. Measurements of the force produced by the mitotic spindle in anaphase. 97:542.

— The motor for poleward chromosome movement in anaphase is in or near the kinetochore. 109:2245.

—, and Gordon, G. W. The total length of spindle microtubules depends on the number of chromosomes present. 100:1.

—, Kubai, D. F., and Hays, T. S. Spindle microtubules and their mechanical associations after micromanipulation in anaphase. 95:91.

— *See* Church, Nicklas, and Lin.

Nickol, J. M. *See* Leiber, Hesse, Nickol, and Felsenfeld.

Nicolas, G. *See* Bassot and Nicolas.

— *See* Nicolas, Nicolas, Johnson, Bassot, and Hastings.

Nicolas, J.-F. *See* Pfeiffer, Jakob, Mikoshiba, Dubois, Guenet, Nicolas, Gaillard, Chevance, and Jacob.

Nicolas, M.-T., Nicolas, G., Johnson, C. H., Bassot, J.-M., and Hastings, J. W. Characterization of the bioluminescent organelles in *Gonyaulax polyedra* (dinoflagellates) after fast-freeze fixation and anti-luciferase immunogold staining. 105:723.

Nicolet, M., Pinçon-Raymond, M., and Rieger, F. Globular and asymmetric acetylcholinesterase in frog muscle basal lamina sheaths. 102:762.

— *See* Rieger, Nicolet, Pinçon-Raymond, Murawsky, Levi, and Edelman.

Nicolini, C. *See* Dolby, Belmont, Borun, and Nicolini.

Nicosia, S. V. *See* Chilton, Nicosia, Sowinski, and Wolf.

Niederman, R., Amrein, P. C., and Hartwig, J. Three-dimensional structure of actin filaments and of an actin gel made with actin-binding protein. 96:1400.

Niehrs, C. *See* Rosa, Weiss, Pepperkok, Ansorge, Niehrs, Stelzer, and Huttner.

Nielsen, L. *See* Pöllänen, Saksela, Salonen, Andreasen, Nielsen, Danø, and Vaheri.

Nielsen, L. S. *See* Kristensen, Nielsen, Grøndahl-Hansen, Andresen, Larsson, and Danø.

— *See* Larsson, Skriver, Nielsen, Hansen, Kristensen, and Danø.

— *See* Picone, Kajtaniak, Nielsen, Behrendt, Mistronicola, Cubellis, Stoppelli, Pedersen, Danø, and Blasi.

— *See* Pöllänen, Hedman, Nielsen, Danø, and Vaheri.

— *See* Skriver, Larsson, Kielberg, Nielsen, Andresen, Kristensen, and Danø.

Nielsen, S. *See* Madsen, Nielsen, and Celis.

Nierzwicki-Bauer, S. A., Balkwill, D. L., and Stevens, S. E., Jr. Three-dimensional ultrastructure of a unicellular cyanobacterium. 97:713.

Niewiarowski, S. *See* Gustafson, Lukasiewicz, Wachtfogel, Norton, Schmaier, Niewiarowski, and Colman.

Nigg, E. A., Cooper, J. A., and Hunter, T. Immunofluorescent localization of a 39,000-dalton substrate of tyrosine protein kinases to the cytoplasmic surface of the plasma membrane. 96:1601.

— *See* Lehner, Stick, Eppenberger, and Nigg.

— *See* Stick, Angres, Lehner, and Nigg.

Nijhof, W., and Wierenga, P. K. Isolation and characterization of the erythroid progenitor cell: CFU-E. 96:386.

Nijweide, P. J., van Iperen-van Gent, A. S., Kawilarang-de Haas, E. W. M., van der Plas, A., and Wassenaar, A. M. Bone formation and calcification by isolated osteoblastlike cells. 93:318.

— *See* Burger, van der Meer, and Nijweide.

Nilausen, K. *See* Van Deurs and Nilausen.

Ninomiya, Y. *See* Hayashi, Ninomiya, Parsons, Hayashi, Olsen, and Trelstad.

Nir, I., Cohen, D., and Papermaster, D. S. Immunocytochemical localization of opsin in the cell membrane of developing retinal photoreceptors. 98:1788.

Nishida, T., Nakagawa, S., Awata, T., Ohashi, Y., Watanabe, K., and Manabe, R. Fibronectin promotes epithelial migration of cultured rabbit cornea in situ. 97:1653.

Nishimoto, T. *See* Ohtsubo, Okazaki, and Nishimoto.

Nishioka, D. *See* Wu, Nishioka, and Bonner.

Nishizawa, K. *See* Sato, Kuriyama, and Nishizawa.

— *See* Sato, Nishizawa, Nakayama, and Kobayashi.

Nishizuka, Y. *See* Kusakabe, Yokoyama, Sakakura, Nomura, Hosick, and Nishizuka.

Nissley, S. M. *See* Cornell, Nissley, and Horwitz.

Nitkin, R. M., Smith, M. A., Magill, C., Fallon, J. R., Yao, Y-M. M., Wallace, B. G., and McMahan, U. J. Identification of agrin, a synaptic organizing protein from *Torpedo* electric organ. 105:2471.

— *See* Godfrey, Nitkin, Wallace, Rubin, and McMahan.

Nitsch, L., and Wollman, S. H. Ultrastructure of intermediate stages in polarity reversal of thyroid epithelium in follicles in suspension culture. 86:875.

— *See* Tacchetti, Quarto, Nitsch, Hartmann, and Cancedda.

Niwa, Y. *See* Skosey, Chow, Nusinow, May, Gestautas, and Niwa.

Nixon, R. A., Brown, B. A., and Marotta, C. A. Posttranslational modification of a neurofilament protein during axoplasmic transport: implications for regional specialization of CNS axons. 94:150.

—, and Logvinenko, K. B. Multiple fates of newly synthesized neurofilament proteins: evidence for a stationary neurofilament network distributed nonuniformly along axons of retinal ganglion cell neurons. 102:647.

— *See* Brown, Nixon, and Marotta.

— *See* Lewis and Nixon.

Noble, M., Lewis, S. A., and Cowan, N. J. The microtubule binding domain of microtubule-associated protein MAP1B contains a repeated sequence motif unrelated to that of MAP2 and Tau. 109:3367.

Noda, M., and Rodan, G. Transcriptional regulation of osteopontin production in rat osteoblast-like cells by parathyroid hormone. 108:713.

—, and Vogel, R. Fibroblast growth factor enhances type β1 transforming growth factor gene expression in osteoblast-like cells. 109:2529.

—, Yoon, K., Rodan, G. A., and Koppel, D. E. High lateral mobility of endogenous and transfected alkaline phosphatase: a phosphatidylinositol-anchored membrane protein. 105:1671.

Noe, B. D., Andrews, P. C., Dixon, J. E., and Spiess, J. Cotranslational and posttranslational proteolytic processing of preprosomatostatin-I in intact islet tissue. 103:1205.

—, Debo, G., and Spiess, J. Comparison of prohormone processing activities in islet microsomes and secretory granules: evidence for distinct converting enzymes for separate islet prosomatostatins. 99:578.

—, and Moran, M. N. Association of newly synthesized islet prohormones with intracellular membranes. 99:418.

— *See* Fletcher, Quigley, Bauer, and Noe.

Noegel, A. *See* André, Brink, Gerisch, Isenberg, Noegel, Schleicher, Segall, and Wallraff.

— *See* Witke, Schleicher, Lottspeich, and Noegel.

Noegel, A. A., Rapp, S., Lottspeich, F., Schleicher, M., and Stewart, M. The *Dictyostelium* gelation factor shares a putative actin binding site with α-actinins and dystrophin and also has a rod domain containing six 100-residue motifs that appear to have a cross-beta conformation. 109:607.

Noga, S. J. *See* Simons, Noga, Colombani, Beschorner, Coffey, and Hess.

Nolte, V. *See* Schmidt, Robenek, Harrach, Glössl, Nolte, Hörmann, Richter, and Kresse.

Nomura, S., Wills, A. J., Edwards, D. R., Heath, J. K., and Hogan, B. L. M. Developmental expression of 2ar (osteopontin) and SPARC (osteonectin) RNA as revealed by in situ hybridization. 106:441.

Nomura, T. *See* Kusakabe, Yokoyama, Sakakura, Nomura, Hosick, and Nishizuka.

Norenberg, M. D., Dutt, K., and Reif-Lehrer, L. Glutamine synthetase localization in cortisol-induced chick embryo retinas. 84:803.

Norgauer, J., Just, I., Aktories, K., and Sklar, L. A. Influence of botulinum C2 toxin on F-actin and *N*-formyl peptide receptor dynamics in human neutrophils. 109:1133.

Norman, A. W. *See* Thorens, Roth, Norman, Perrelet, and Orci.

Noronha-Blob, L. *See* Kerjaschki, Noronha-Blob, Sacktor, and Farquhar.
Norrild, B. *See* Lyles, Norrild, and Bock.
Norton, K. J. *See* Gustafson, Lukasiewicz, Wachtfogel, Norton, Schmaier, Niewiarowski, and Colman.
Norton, P. *See* Cohen, Reinhardt, Castellani, Norton, and Stirewalt.
Norwood, T. H. *See* Burmer, Zeigler, and Norwood.
Nose, A., and Takeichi, M. A novel cadherin cell adhesion molecule: its expression patterns associated with implantation and organogenesis of mouse embryos. 103:2649.
— *See* Hatta, Nose, Nagafuchi, and Takeichi.
— *See* Hirano, Nose, Hatta, Kawakami, and Takeichi.
Nose, P. S., Griffith, L. C., and Schulman, H. Ca^{2+}-dependent phosphorylation of tyrosine hydroxylase in PC12 cells. 101:1182.
Notario, V., Gutkind, J. S., Imaizumi, M., Katamine, S., and Robbins, K. C. Expression of the *fgr* protooncogene product as a function of myelomonocytic cell maturation. 109:3129.
Nothnagel, E., and Webb, W. W. Hydrodynamic models of viscous coupling between motile myosin and endoplasm in Characean algae. 94:444.
Nothnagel, E. A., Barak, L. S., Sanger, J. W., and Webb, W. W. Fluorescence studies on modes of cytochalasin B and phallotoxin action on cytoplasmic streaming in *Chara*. 88:364.
—, **Sanger, J. W., and Webb, W. W.** Effects of exogenous proteins on cytoplasmic streaming in perfused *Chara* cells. 93:735.
Novak, E. K. *See* Brown, Novak, and Swank.
— *See* Brown, Novak, Takeuchi, Moore, Medda, and Swank.
Novak-Hofer, I., Küng, W., and Eppenberger, U. Role of extracellular electrolytes in the activation of ribosomal protein S6 kinase by epidermal growth factor, insulin-like growth factor 1, and insulin in ZR-75-1 cells. 106:395.
Noventa, D. D. *See* Carraro, Morale, Mussini, Lucke, Cantini, Betto, Catani, Dalla Libera, Betto, and Noventa.
Novick, P., and Schekman, R. Export of major cell surface proteins is blocked in yeast secretory mutants. 96:541.
— *See* Bacon, Salminen, Ruohola, Novick, and Ferro-Novick.
— *See* Ferro-Novick, Novick, Field, and Schekman.
Novick, P. J. *See* Cleves, Novick, and Bankaitis.
— *See* Salminen and Novick.
— *See* Walworth and Novick.
Novikoff, A. B., Novikoff, P. M., Rosen, O. M., and Rubin, C. S. Organelle relationships in cultured 3T3-L1 preadipocytes. 87:180.
— *See* Novikoff, La Russo, Novikoff, Stockert, Yam, and Le Sage.
— *See* Novikoff, Touster, Novikoff, and Tulsiani.
Novikoff, P. M., La Russo, N. F., Novikoff, A. B., Stockert, R. J., Yam, A., and Le Sage, G. D. Immunocytochemical localization of lysosomal β-galactosidase in rat liver. 97:1559.
—, **Touster, O., Novikoff, A. B., and Tulsiani, D. P.** Effects of swainsonine on rat liver and kidney: biochemical and morphological studies. 101:339.
— *See* Novikoff, Novikoff, Rosen, and Rubin.
Nowogrodzki, R. *See* Rieder and Nowogrodzki.
Nozaki, N. *See* Masumoto, Masukata, Muro, Nozaki, and Okazaki.
Nüße, O., and Lindau, M. The dynamics of exocytosis in human neutrophils. 107:2117.
Nuccitelli, R. *See* Busa, Ferguson, Joseph, Williamson, and Nuccitelli.
— *See* Busa and Nuccitelli.
— *See* Erickson and Nuccitelli.
— *See* Kline, Robinson, and Nuccitelli.
— *See* Webb and Nuccitelli.
Nuckolls, G. H. *See* Duband, Nuckolls, Ishihara, Hasegawa, Yamada, Thiery, and Jacobson.
Nudelman, E. D. *See* Koehler, Nudelman, and Hakomori.
Nugent, D. J. *See* Piotrowicz, Orchekowski, Nugent, Yamada, and Kunicki.
Nunez, E. A. *See* Barasch, Gershon, Nunez, Tamir, and Al-Awqati.
— *See* Bernd, Gershon, Nunez, and Tamir.
Nunez, J. *See* Couchie, Fages, Bridoux, Rolland, Tardy, and Nunez.
— *See* Luduena, Fellous, Francon, Nunez, and McManus.
Nunnally, M. H., D'Angelo, J. M., and Craig, S. W. Filamin concentration in cleavage furrow and midbody region: Frequency of occurrence compared with that of alpha-actinin and myosin. 87:219.
Nusbacher, J. *See* Jones, Nusbacher, and Anderson.
Nusinow, S. *See* Skosey, Chow, Nusinow, May, Gestautas, and Niwa.
Nussdorfer, G. *See* Zanini, Giannattasio, Nussdorfer, Margolis, Margolis, and Meldolesi.
Nuydens, R. *See* Geuens, Gundersen, Nuydens, Cornelissen, Bulinski, and De Brabander.
Nybroe, O., Albrechtsen, M., Dahlin, J., Linnemann, D., Lyles, J. M., Møller, C. J., and Bock, E. Biosynthesis of the neural cell adhesion molecule: characterization of polypeptide C. 101:2310.
Nyman, U., Hallman, H., Hadlaczky, G., Pettersson, I., Sharp, G., and Ringertz, N. R. Intranuclear localization of snRNP antigens. 102:137.

O

Oakley, B. R., and Morris, N. R. A mutation in *Aspergillus nidulans* that blocks the transition from interphase to prophase. 96:1155.
—, **and Rinehart, J. E.** Mitochondria and nuclei move by different mechanisms in *Aspergillus nidulans*. 101:2392.
Oates, P. J., and Touster, O. In vitro fusion of *Acanthamoeba* phagolysosomes. III. Evidence that cyclic nucleotides and vacuole subpopulations respectively control the rate and the extent of vacuole fusion in *Acanthamoeba* homogenates. 85:804.
Obberghen, E. V. *See* Carpentier, Obberghen, Gorden, and Orci.
Oberdorf, J. A., Head, J. F., and Kaminer, B. Calcium uptake and release by isolated cortices and microsomes from the unfertilized egg of the sea urchin *Strongylocentrotus droebachiensis*. 102:2205.
Obika, M. *See* Ogawa, Negishi, and Obika.
Obinata, T. *See* Reinach, Masaki, Shafiq, Obinata, and Fischman.
— *See* Takano-Ohmuro, Obinata, Kawashima, Masaki, and Tanaka.
O'Brien, E. T. *See* Walker, O'Brien, Pryer, Soboeiro, Voter, Erickson, and Salmon.
O'Brien, J. C. Tyrosine aminotransferase sensitivity to bromodeoxyuridine during restricted intervals of S phase in hepatoma cells. 87:629.
O'Brien, T. G. *See* Sussman, Prettyman, and O'Brien.
Öbrink, B. *See* Ocklind, Forsum, and Öbrink.
— *See* Ronne, Ocklind, Wiman, Rask, Öbrink, and Peterson.
Ochs, R. L. *See* Smith, Spector, Woodcock, Ochs, and Bhorjee.
— *See* Stearns and Ochs.
Ocklind, C., Forsum, U., and Öbrink, B. Cell surface localization and tissue distribution of a hepatocyte cell-cell adhesion glycoprotein (cell-CAM 105). 96:1168.
— *See* Ronne, Ocklind, Wiman, Rask, Öbrink, and Peterson.
O'Connell, M. L. *See* Canipari, O'Connell, Meyer, and Strickland.
O'Connell, T. M. *See* Rheinwald, Jorgensen, Hahn, Terpstra, O'Connell, and Plummer.
O'Connor, P., and Burnside, B. Actin-dependent cell elongation in teleost retinal rods; requirement for actin filament assembly. 89:517.
—, **and Burnside, B.** Elevation of cyclic AMP activates an actin-dependent contraction in teleost retinal rods. 95:445.
O'Connor, S. E. *See* Davies, Truskey, Warren, O'Connor, and Eisenhaure.
Oda, M. *See* Phillips, Oda, Yousef, and Funatsu.
O'Day, K. *See* Palmer, O'Day, Wener, Andrews, and Margolis.
O'Dell, D. *See* Jacobson, O'Dell, and August.
— *See* Jacobson, O'Dell, Holifield, Murphy, and August.
O'Donnell, P. T., and Bernstein, S. I. Molecular and ultrastructural defects in a *Drosophila* myosin heavy chain mutant: differential effects on muscle function produced by similar thick filament abnormalities. 107:2601.
Oegema, T. R. *See* Klein, Brown, Oegema, Brenchley, Anderson, Dickinson, Horigan, and Hassell.
Oesch, F. *See* Wieser and Oesch.
Oestreicher, A. B. *See* Van Hooff, Holthuis, Oestreicher, Boonstra, De Graan, and Gispen.
Oettling, G., Schmidt, H., and Drews, U. The muscarinic receptor of chick embryo cells: correlation between ligand binding and calcium mobilization. 100:1073.
O'Farrell, S. *See* Saunders, Jalkanen, O'Farrell, and Bernfield.
Ogawa, K., Negishi, S., and Obika, M. Immunological dissimilarity in protein component (dynein 1) between outer and inner arms within sea urchin sperm axonemes. 92:706.
— *See* Okuno, Asai, Ogawa, and Brokaw.
Ogburn, J. A. *See* Feldherr, Cohen, and Ogburn.
— *See* Feldherr and Ogburn.
Ogihara, S., and Tonomura, Y. A novel 36,000-dalton actin-binding protein purified from microfilaments in *Physarum* plasmodia which aggregates actin filaments and blocks actin-myosin interaction. 93:604.
Ogino, T. *See* Gillies, Ogino, Shulman, and Ward.
Ogou, S.-I., Yoshida-Noro, C., and Takeichi, M. Calcium-dependent cell-cell adhesion molecules common to hepatocytes and teratocarcinoma stem cells. 97:944.
O'Guin, W. M., Manabe, M., and T.-T. Sun. Association of a basic 25K protein with membrane coating granules of human epidermis. 109:2313.
— *See* Knapp, O'Guin, and Sawyer.
— *See* Lynch, O'Guin, Hardy, Mak, and Sun.
Ogura, M. *See* Ito, Tanaka, Yoshida, Onoda, Ohta, Hagiwara, Itoh, Ogura, Saito, and Hidaka.
Oh, T. H. *See* Markelonis, Oh, Park, Cha, Sofia, Kim, and Azari.
Ohad, I., Kyle, D. J., and Arntzen, C. J. Membrane protein damage and

repair. II. Removal and replacement of inactivated 32-kilodalton polypeptides in chloroplast membranes. 99:481.
— *See* Gershoni and Ohad.
— *See* Owens and Ohad.
— *See* Schuster, Dewit, Staehelin, and Ohad.
O'Halloran, T. *See* Tidball, O'Halloran, and Burridge.
Ohanion, V. *See* Jones, Jackson, Price, Patel, Ohanion, Lear, and Critchley.
Ohashi, K., Mikawa, T., and Maruyama, K. Localization of Z-protein in isolated Z-disk sheets of chicken leg muscle. 95:85.
— *See* Maruyama, Sawada, Kimura, Ohashi, Higuchi, and Umazume.
— *See* Maruyama, Yoshioka, Higuchi, Ohashi, Kimura, and Natori.
Ohashi, Y. *See* Nishida, Nakagawa, Awata, Ohashi, Watanabe, and Manabe.
Ohkuma, S., Chudzik, J., and Poole, B. The effects of basic substances and acidic ionophores on the digestion of exogenous and endogenous proteins in mouse peritoneal macrophages. 102:959.
—, **and Poole, B.** Cytoplasmic vacuolation of mouse peritoneal macrophages and the uptake into lysosomes of weakly basic substances. 90:656.
— *See* Poole and Ohkuma.
Ohmori, K. Fretto, L. J., Harrison, R. L., Switzer, M. E. P., Erickson, H. P., and McKee, P. A. Electron microscopy of human factor VIII/von Willebrand glycoprotein: effect of reducing reagents on structure and function. 95:632.
Ohnishi, S. *See* Ono, Mifune, Yoshimura, Ohnishi, and Kuwano.
Ohta, H. *See* Ito, Tanaka, Yoshida, Onoda, Ohta, Hagiwara, Itoh, Ogura, Saito, and Hidaka.
Ohtsubo, M., Okazaki, H., and Nishimoto, T. The RCC1 protein, a regulator for the onset of chromosome condensation locates in the nucleus and binds to DNA. 109:1389.
Oi, V. T., Glazer, A. N., and Stryer, L. Fluorescent phycobiliprotein conjugates for analysis of cells and molecules. 93:981.
Oishi, M. *See* Kondo, Watanabe, Sasaki, Uehara, and Oishi.
Ojakian, G. *See* Fairbairn, Gilbert, Ojakian, Schwimmer, and Quigley.
— *See* Kreibich, Ojakian, Rodriguez-Boulan, and Sabatini.
Ojakian, G. K., and Schwimmer, R. The polarized distribution of an apical cell surface glycoprotein is maintained by interactions with the cytoskeleton of Madin-Darby canine kidney cells. 107:2377.
— *See* Cramer, Milks, Brontoli, Ojakian, Wright, and Showell.
— *See* Herzlinger, Easton, and Ojakian.
— *See* Herzlinger and Ojakian.
Oka, J. A., and Weigel, P. H. Binding and spreading of hepatocytes on synthetic galactose culture surfaces occur as distinct and separable threshold responses. 103:1055.
Okabe, S., and Hirokawa, N. Incorporation and turnover of biotin-labeled actin microinjected into fibroblastic cells: an immunoelectron microscopic study. 109:1581.
—, **and Hirokawa, N.** Microtubule dynamics in nerve cells: analysis using microinjection of biotinylated tubulin into PC12 cells. 107:651.
— *See* Hirokawa, Shiomura, and Okabe.
Okada, T. *See* Robinson, Okada, Castellot, and Karnovsky.
Okada, Y. *See* Kaneda, Uchida, Mekada, Nakanishi, and Okada.
— *See* Mekada, Okada, and Uchida.
Okagaki, T., Clark, B. A., and Twiggs, L. B. Measurement of number and cross-sectional area of basal cell pseudopodia: A new morphometric method. 91:629.
—, **and Kamiya, R.** Microtubule sliding in mutant *Chlamydomonas* axonemes devoid of outer or inner dynein arms. 103:1895.
Okamura, C. S. *See* Jones, Okamura, and Martin.
Okazaki, H. *See* Ohtsubo, Okazaki, and Nishimoto.
Okazaki, T. *See* Masumoto, Masukata, Muro, Nozaki, and Okazaki.
O'Keefe, E. *See* Kaiser, O'Keefe, and Bennett.
O'Keefe, E. J., Briggaman, R. A., and Herman, B. Calcium-induced assembly of adherens junctions in keratinocytes. 105:807.
Okita, J. R., Pidard, D., Newman, P. J., Montgomery, R. R., and Kunicki, T. J. On the association of glycoprotein Ib and actin-binding protein in human platelets. 100:317.
Okon, E. *See* Hochman, Levy, Mador, Gottesman, Shearer, and Okon.
Okuno, M. Inhibition and relaxation of sea urchin sperm flagella by vanadate. 85:712.
—, **Asai, D. J., Ogawa, K., and Brokaw, C. J.** Effects of antibodies against dynein and tubulin on the stiffness of flagellar axonemes. 91:689.
Oldberg, A., Jirskog-Hed, B., Axelsson, S., and Heingård, D. Regulation of bone sialoprotein (BSP) mRNA by steroid hormones. 109:3183.
Oldberg, Å. *See* Hayman, Oldberg, Martin, and Ruoslahti.
Olden, K., Law, J., Hunter, V. A., Romain, R., and Parent, J. B. Inhibition of fusion of embryonic muscle cells in culture by tunicamycin is prevented by leupeptin. 88:199.
— *See* Chen, Olden, Bernard, and Chu.
— *See* Humphries, Akiyama, Komoriya, Olden, and Yamada.
— *See* Nagata, Humphries, Olden, and Yamada.
O'Leary, J. J. *See* Haire, Peterson, and O'Leary.
— *See* Hall, O'Leary, and Rosenberg.
Olehnik, K. *See* Penningroth, Cheung, Olehnik, and Koslosky.
Olink-Coux, M. *See* Grossi de Sa, Martins de Sa, Harper, Olink-Coux, Huesen, and Scherrer.
Olins, A. L., Olins, D. E., Zentgraf, H., and Franke, W. W. Visualization of nucleosomes in thin sections by stereo electron microscopy. 87:833.
— *See* Allen, Kennel, Cacheiro, Olins, and Olins.
— *See* Olins and Olins.
— *See* Olins, Olins, Cacheiro, and Tan.
Olins, D. E., and Olins, A. L. In vitro DNA synthesis in the macronuclear replication band of *Euplotes eurystomus*. 104:1125.
—, **Olins, A. L., Cacheiro, L. H., and Tan, E. M.** Proliferating cell nuclear antigen/cyclin in the ciliate *Euplotes eurystomus*: localization in the replication band and in micronuclei. 109:1399.
— *See* Allen, Kennel, Cacheiro, Olins, and Olins.
— *See* Olins, Olins, Zentgraf, and Franke.
Olivas, R. *See* Spearman, Hurley, Olivas, Ulrich, and Butcher.
Olive, J. *See* de Vitry, Olive, Drapier, Recouvreur, and Wollman.
— *See* Wollman, Olive, Bennoun, Recouvreur.
Oliver, C. Endocytic pathways at the lateral and basal cell surfaces of exocrine acinar cells. 95:154.
— *See* Broadwell and Oliver.
— *See* Robbins, Oliver, Bateman, Krag, Galloway, and Mellman.
— *See* Storrie, Pool, Sachdeva, Maurey, and Oliver.
Oliver, J. M., Osborne, W. R., Pfeiffer, J. R., Child, F. M., and Berlin, R. D. Purine nucleoside phosphorylase is associated with centrioles and basal bodies. 91:837.
—, **Seagrave, J. C., Pfeiffer, J. R., Feibig, M. L., and Deanin, G. G.** Surface functions during mitosis in rat basophilic leukemia cells. 101:2156.
— *See* Berlin and Oliver.
— *See* Koppel, Oliver, and Berlin.
— *See* Pfeiffer, Seagrave, Davis, Deanin, and Oliver.
— *See* Sager, Rothfeld, Oliver, and Berlin.
— *See* Walter, Berlin, Pfeiffer, and Oliver.
Olmsted, J. B. Tubulin pools in differentiating neuroblastoma cells. 89:418.
—, **Stemple, D. L., Saxton, W. M., Neighbors, B. W., and McIntosh, J. R.** Cell cycle-dependent changes in the dynamics of MAP 2 and MAP 4 in cultured cells. 109:211.
— *See* Parysek, Asnes, and Olmsted.
— *See* Parysek, Wolosewick, and Olmsted.
— *See* Talian, Olmsted, and Goldman.
— *See* Wagner, Olmsted, and Marder.
O'Loughlin, J., Lehr, L., Havaranis, A., and Heywood, S. M. Encapsulation of "core" elF3, regulatory components of elF3 and mRNA into liposomes, and their subsequent uptake into myogenic cells in culture. 90:160.
Olsen, B. R. *See* Hayashi, Ninomiya, Parsons, Hayashi, Olsen, and Trelstad.
— *See* Sugrue, Gordon, Seyer, Dublet, van der Rest, and Olsen.
Olsen, E. *See* Detmers, Wright, Olsen, Kimball, and Cohn.
Olsnes, S., Tønnessen, T. I., and Sandvig, K. pH-regulated anion antiport in nucleated mammalian cells. 102:967.
— *See* Gonatas, Stieber, Olsnes, and Gonatas.
— *See* Madshus, Olsnes, and Sandvig.
— *See* Sandvig and Olsnes.
— *See* Sandvig, Olsnes, Brown, Petersen, and Van Deurs.
— *See* Sandvig, Olsnes, Petersen, and Van Deurs.
— *See* Sandvig, Sundan, and Olsnes.
— *See* Van Deurs, Sandvig, Petersen, Olsnes, Simons, and Griffiths.
— *See* Van Deurs, Tønnessen, Petersen, Sandvig, and Olsnes.
Olson, E. *See* Lathrop, Olson, and Glaser.
Olson, E. N., Sternberg, E., Hu, J. S., Spizz, G., and Wilcox, C. Regulation of myogenic differentiation by type β transforming growth factor. 103:1799.
— *See* Gossett, Zhang, and Olson.
Olson, G. E. *See* Linck, Olsen, and Langevin.
— *See* Rifkin and Olson.
Olson, J. A., and Kilejian, A. Involvement of spectrin and ATP in infection of resealed erythrocyte ghosts by the human malarial parasite *Plasmodium falciparum*. 95:757.
Olson, P. S. *See* Crow, Olson, and Stockdale.
Olsson, L., Due, C., and Diamant, M. Treatment of human cell lines with 5-azacytidine may result in profound alterations in clonogenicity and growth rate. 100:508.
Olszewski, T. E. *See* Bowers and Olszewski.
— *See* Bowers, Olszewski, and Hyde.
Olwin, B. B., and Hauschka, S. D. Cell surface fibroblast growth factor

and epidermal growth factor receptors are permanently lost during skeletal muscle terminal differentiation in culture. 107:761.
— *See* Clegg, Linkhart, Olwin, and Hauschka.
O'Malley, B. W. *See* Catterall, Stein, Kristo, Means, and O'Malley.
Omann, G. M., and Sklar, L. A. Response of neutrophils to stimulus infusion: differential sensitivity of cytoskeletal activation and oxidant production. 107:951.
— *See* Sklar, Omann, and Painter.
Omlin, F. X., Webster, H. deF., Palkovits, C. G., and Cohen, S. R. Immunocytochemical localization of basic protein in major dense line regions of central and peripheral myelin. 95:242.
— *See* Matthieu, Roch, Omlin, Rambaldi, Almazan, and Braun.
O'Morchoe, C. C. C., Jones, W. R., III, Jarosz, H. M., O'Morchoe, P.J., and Fox., L. M. Temperature dependence of protein transport across lymphatic endothelium. 98:629.
O'Morchoe, P. J. *See* O'Morchoe, Jones, Jarosz, O'Morchoe, and Fox.
Omori, K. *See* Matsuura, Masuda, Omori, Negishi, and Tashiro.
— *See* Takemura, Omori, Tanaka, Omori, Matsuura, and Tashiro.
Omoto, C. K., and Kung, C. Rotation and twist of the central-pair microtubules in the cilia of paramecium. 87:33.
Ong, D. E. *See* Liau, Ong, and Chytil.
Ono, M., Mifune, K., Yoshimura, A., Ohnishi, S., and Kuwano, M. Monensin-resistent mouse Balb/3T3 cell mutant with aberrant penetration of vesicular stomatitis virus. 101:60.
Onoda, K. *See* Ito, Tankaka, Yoshida, Onoda, Ohta, Hagiwara, Itoh, Ogura, Saito, and Hidaka.
Onuma, E. K., and Hui, S.-W. Electric field-directed cell shape changes, displacement, and cytoskeletal reorganization are calcium dependent. 106:2067.
Oohira, A., Wight, T. N., McPherson, J., and Bornstein, P. Biochemical and ultrastructural studies of proteoheparan sulfates synthesized by PYS-2, a basement membrane-producing cell line. 92:357.
Oosawa, F. *See* Prochniewicz-Nakayama, Yanagida, and Oosawa.
Op den Kamp, J. A. F. *See* Christiansson, Kuypers, Roelofsen, Op den Kamp, and van Deenen.
— *See* Kuypers, Roelofsen, Berendsen, Op den Kamp, and van Deenen.
Oppenheimer-Marks, N., and Grinnell, F. Inhibition of fibronectin receptor function by antibodies against baby-hamster-kidney cell wheat germ agglutinin receptors. 95:876.
Opperdoes, F. R., Baudhuin, P., Coppens, I., De Roe, C., Edwards, S. W., Weijers, P. J., and Misset, O. Purification, morphometric analysis, and characterization of the glycosomes (microbodies) of the protozoan hemoflagellate *Trypanosoma brucei*. 98:1178.
Orchekowski, R. P. *See* Piotrowicz, Orchekowski, Nugent, Yamada, and Kunicki.
Orci, L., Halban, P., Amherdt, M., Ravazzola, M., Vassalli, J.-D., and Perrelet, A. Nonconverted, amino acid analog-modified proinsulin stays in a Golgi-derived, clathrin-coated membrane compartment. 99:2187.
—, **Ravazzola, M., Amherdt, M., Madsen, O., Perrelet, A., Vassalli, J.-D., and Anderson, R. G. W.** Conversion of proinsulin to insulin occurs coordinately with acidification of maturing secretory vesicles. 103:2273.
—, **Ravazzola, M., Amherdt, M., Yanaihara, C., Yanaihara, N., Halban, P., Renold, A. E., and Perrelet, A.** Insulin, but not C-peptide (proinsulin), is present in crinophagic bodies of the pancreatic B-cell. 98:222.
— *See* Anderson and Orci.
— *See* Barazzone, Lesniak, Gorden, Van Obberghen, Carpentier, and Orci.
— *See* Bearer and Orci.
— *See* Carpentier, Brown, Iacopetta, and Orci.
— *See* Carpentier, Gazzano, van Obberghen, Fehlmann, Freychet, and Orci.
— *See* Carpentier, Gorden, Anderson, Goldstein, Brown, Cohen, and Orci.
— *See* Carpentier, Obberghen, Gorden, and Orci.
— *See* Carpentier, White, Orci, and Kahn.
— *See* Fehlmann, Carpentier, Le Cam, Thamm, Saunders, Brandenburg, Orci, and Freychet.
— *See* Iacopetta, Carpentier, Pozzan, Lew, Gorden, and Orci.
— *See* Lombardi, Montesano, Furie, Silverstein, and Orci.
— *See* Meda, Bruzzone, Knodel, and Orci.
— *See* Meda, Kohen, Kohen, Rabinovitch, and Orci.
— *See* Montesano, Mossaz, Ryser, Orci, and Vassalli.
— *See* Montesano, Mossaz, Vassalli, and Orci.
— *See* Montesano, Mouron, Amherdt, and Orci.
— *See* Montesano, Orci, and Vassalli.
— *See* Pepper, Spray, Chanson, Montesano, Orci, and Meda.
— *See* Pepper, Vassalli, Montesano, and Orci.
— *See* Powell, Orci, Craik, and Moore.
— *See* Roth, Brown, and Orci.
— *See* Thorens, Roth, Norman, Perrelet, and Orci.
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Oresajo, C. O. *See* Howard and Oresajo.
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Orkin, R. W., and Toole, B. P. Chick embryo fibroblasts produce two forms of hyaluronidase. 85:248.
— *See* Heathcote, Bruns, and Orkin.
— *See* Heathcote and Orkin.
Orlidge, A., and D'Amore, P. A. Inhibition of capillary endothelial cell growth by pericytes and smooth muscle cells. 105:1455.
Orlow, S. *See* Horwitz, Chia, Harracksingh, Orlow, Pifko-Hirst, Schneck, Sorbara, Speaker, and Wilk.
Ormerod, E. J. *See* Warburton, Ormerod, Monaghan, Ferns, and Rudland.
Ornatsky, O. I. *See* Belkin, Ornatsky, Glukhova, and Koteliansky.
Ornberg, R. L., and Reese, T. S. Beginning of exocytosis captured by rapid-freezing of *Limulus* amebocytes. 90:40.
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Orr, G. A. *See* Lieberman, Wasco, MacLeod, Satir, and Orr.
Ort, V. M. *See* Rosenfeld, Marcantonio, Hakimi, Ort, Atkinson, Sabatini, and Kreibich.
Ortiz, I. *See* Epstein, Berliner, Casey, and Ortiz.
— *See* Epstein, Miller, Ortiz, and Berliner.
— *See* Epstein, Ortiz, and Mackinnon.
Osawa, S., Betz, G., and Hall, P. F. Role of actin in the responses of adrenal cells to ACTH and cyclic AMP: inhibition by DNase I. 99:1335.
— *See* Hall, Osawa, and Thomasson.
Osborn, M. *See* Bartnik, Osborn, and Weber.
— *See* Franke, Schmid, Freudenstein, Appelhans, Osborn, Weber, and Keenan.
— *See* Fürst, Osborn, Nave, and Weber.
— *See* Fürst, Osborn, and Weber.
— *See* Harris, Osborn, and Weber.
— *See* Wick, Seagull, Osborn, Weber, and Gunning.
Osborne, M. A. *See* Silver, Sadler, and Osborne.
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Osdoby, P. *See* Oursler, Bell, Clevinger, and Osdoby.
O'Shaughnessy, D. *See* Bennett, Kan, and O'Shaughnessy.
— *See* Bennett and O'Shaughnessy.
O'Shea, K. S., and Dixit, V. M. Unique distribution of the extracellular matrix component thrombospondin in the developing mouse embryo. 107:2739.
Oshima, R. G. *See* Grover, Oshima, and Adamson.
Oshima, T. *See* Kanai, Takemura, Oshima, Mori, Ihara, Yanagisawa, Masaki, and Hirokawa.
Osmani, S. A., May, G. S., and Morris, N. R. Regulation of the mRNA levels of *nimA*, a gene required for the G2-M transition in *Aspergillus nidulans*. 104:1495.
Ossoinak, A. *See* Egyházi, Pigon, Ossoinak, Holst, and Tayip.
Ossowski, L. In vivo invasion of modified chorioallantoic membrane by tumor cells: the role of cell surface-bound urokinase. 107:2437.
Ostlund, R. E., Jr., Leung, J. T., and Hajek, S. V. Regulation of microtubule assembly in cultured fibroblasts. 85:386.
O'Sullivan, A. J. *See* Check, Jackson, O'Sullivan, Moreton, Berridge, and Burgoyne.
Otey, C. A., Kalnoski, M. H., Lessard, J. L., and Bulinski, J. C. Immunolocalization of the gamma isoform of nonmuscle actin in cultured cells. 102:1726.
Ottaviano, Y. *See* Gerace, Ottaviano, and Kondor-Koch.
Ottensmeyer, F. P. *See* Arsenault and Ottensmeyer.
Otter, T. *See* Pratt, Otter, and Salmon.
Otto, J. J. Detection of vinculin-binding proteins with an ^{125}I-vinculin gel overlay technique. 97:1283.
Otto, J. M., Grenett, H. E., and Fuller, G. M. The coordinated regulation of fibrinogen gene transcription by hepatocyte-stimulating factor and dexamethasone. 105:1067.
— *See* Fuller, Otto, Woloski, McGary, and Adams.
Ou, J.-H. *See* Garcia, Ou, Rutter, and Walter.
Ouellet, C. *See* Landry, Bernier, Ouellet, Goyette, and Marceau.
Ouellette, A. J., Greco, R. M., James, M., Frederick, D., Naftilan, J., and Fallon, J. T. Developmental regulation of cryptdin, a corticostatin/defensin precursor mRNA in mouse small intestinal crypt epithelium. 108:1687.
Oursler, M. J., Bell, L. V., Clevinger, B., and Osdoby, P. Identification of osteoclast-specific monoclonal antibodies. 100:1592.
Overath, P. *See* Roditi, Schwarz, Pearson, Beecroft, Liu, Richardson, Bühring, Pleiss, Bülow, Williams, and Overath.
Ovtracht, L. A *See* Busson-Mabillot, Chambaut-Guérin, Ovtracht, Muller, and Rossignol.

Owaribe, K., and Eguchi, G. Increase in actin contents and elongation of apical projections in retinal pigmented epithelial cells during development of the chicken eye. 101:590.
—, **Kodama, R., and Eguchi, G.** Demonstration of contractility of circumferential actin bundles and its morphogenetic significance in pigmented epithelium in vitro and in vivo. 90:507.
—, **and Masuda, H.** Isolation and characterization of circumferential microfilament bundles from retinal pigmented epithelial cells. 95:310.
— *See* Goshima, Masuda, and Owaribe.
— *See* Kapprell, Owaribe, and Franke.
Owen, L. *See* Siminoski, Gonnella, Bernanke, Owen, Neutra, and Murphy.
Owen, N. E. Effect of catecholamines on Na/H exchange in vascular smooth muscle cells. 103:2053.
— Effect of TPA on ion fluxes and DNA synthesis in vascular smooth muscle cells. 101:454.
Owens, G. C., and Ohad, I. Phosphorylation of *Chlamydomonas reinhardi* chloroplast membrane proteins in vivo and in vitro. 93:712.
— *See* Murray, Owens, Prediger, Crossin, Cunningham, and Edelman.
Owens, G. K., Geisterfer, A. A. T., Yang, Y. W.-H., and Komoriya, A. Transforming growth factor-β-induced growth inhibition and cellular hypertrophy in cultured vascular smooth muscle cells. 107:771.
—, **Loeb, A., Gordon, D., and Thompson, M. M.** Expression of smooth muscle-specific α-isoactin in cultured vascular smooth muscle cells: relationship between growth and cytodifferentiation. 102:343.
— *See* Blank, Thompson, and Owens.
Oyama, F. *See* Takei, Oyama, Kimura, Hyodo, Mizuno, and Shimura.
Øyen, O. *See* Pariset, Feinberg, Dacheux, Øyen, Jahnsen, and Weinman.
Oyler, G. A., Higgins, G. A., Hart, R. A., Battenberg, E., Billingsley, M., Bloom, F. E., and Wilson, M. C. The identification of a novel synaptosomal-associated protein: SNAP-25, differentially expressed by neuronal subpopulations. 109:3039.
Ozaki, K., and Hatano, S. Mechanism of regulation of actin polymerization by *Physarum* profilin. 98:1919.

P

Paasivuo, R. *See* Virtanen, Badley, Paasivuo, and Lehto.
Paavola, L. G., and Strauss, J. F. III. Uptake of lipoproteins by in situ perfused rat ovaries: identification of binding sites for high density lipoproteins. 97:593.
—, **Strauss, J. F. III, Boyd, C. O., and Nestler, J. E.** Uptake of gold-and [3H] cholesteryl linoleate-labeled human low density lipoprotein by cultured rat granulosa cells: cellular mechanisms involved in lipoprotein metabolism and their importance to steroidogenesis. 100:1235.
Pabion, M. *See* Job, Pabion, and Margolis.
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Pace, C. S. *See* Berglindh, Dibona, Pace, and Sachs.
Pachter, J. S., and Liem, R. K. H. α-Internexin, a 66-kD intermediate filament-binding protein from mammalian central nervous tissues. 101:1316.
— *See* Napolitano, Pachter, Chin, and Liem.
Pacifici, M., Soltesz, R., Thal, G., Shanley, D. J., Boettiger, D., and Holtzer, H. Immunological characterization of the major chick cartilage proteoglycan and its intracellular localization in cultured chondroblasts: a comparison with type II procollagen. 97:1724.
— *See* Adams, Pacifici, Boettiger, and Pallante.
Packman, C. H. *See* Wallace, Wersto, Packman, and Lichtman.
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Padh, H., Lavasa, M., and Steck, T. L. Prelysosomal acidic vacuoles in *Dictyostelium discoideum*. 108:865.
Padilla, S. R. *See* Benya, Brown, and Padilla.
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Pagano, J. S. *See* Newburger, Pagano, Greenberger, Karpas, and Cohen.
Pagano, R. E., Longmuir, K. J., Martin, O. C., and Struck, D. K. Metabolism and intracellular localization of a fluorescently labeled intermediate in lipid biosynthesis within cultured fibroblasts. 91:872.
—, **Sepanski, M. A., and Martin, O. C.** Molecular trapping of a fluorescent ceramide analogue at the Golgi apparatus of fixed cells: interaction with endogenous lipids provides a *trans*-Golgi marker for both light and electron microscopy. 109:2067.
— *See* Koval and Pagano.
— *See* Lipsky and Pagano.
— *See* Sleight and Pagano.
— *See* Uster and Pagano.
Pagh, K., and Gerisch, G. Monoclonal antibodies binding to the tail of *Dictyostelium discoideum* myosin: their effects on antiparallel and parallel assembly and actin-activated ATPase activity. 103:1527.
Pagliaro, L., and Lansing Taylor, D. Aldolase exists in both the fluid and solid phases of cytoplasm. 107:981.
Påhlman, S. *See* Mattsson, Enberg, Ruusala, Hall, and Påhlman.
Paiement, J., Beaufay, H., and Godelaine, D. Coalescence of microsomal vesicles from rat liver: a phenomenon occurring in parallel with enhancement of the glycosylation activity during incubation of stripped rough microsomes with GTP. 86:29.
—, **and Bergeron, J. J. M.** Localization of GTP-stimulated core glycosylation to fused microsomes. 96:1791.
—, **Jolicoeur, M., Fazel, A., and Bergeron, J. J. M.** Reconstitution of the Golgi apparatus after microinjection of rat liver Golgi fragments into *Xenopus* oocytes. 108:1257.
—, **Rachubinski, R. A., Ng Ying Kin, N. M. K., Sikstrom, R. A., and Bergeron, J. J. M.** Membrane fusion and glycosylation in the rat hepatic Golgi apparatus. 92:147.
— *See* Bergeron, Rachubinski, Sikstrom, Posner, and Paiement.
Paik, K. *See* Johnson, Paik, and Higgins.
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Paine, P. L., Austerberry, C. F., Desjarlais, L. J., and Horowitz, S. B. Protein loss during nuclear isolation. 97:1240.
Painter, R. G., and Ginsberg, M. Concanavalin A induces interactions between surface glyoproteins and the platelet cytoskeleton. 92:565.
—, **Prodouz, K. N., and Gaarde, W.** Isolation of a subpopulation of glycoprotein IIb-III from platelet membranes that is bound to membrane actin. 100:652.
—, **Whisenand, J., and McIntosh, A. T.** Effects of cytochalasin B on actin and myosin association with particle binding sites in mouse macrophages: implications with regard to the mechanism of action of the cytochalasins. 91:373.
—, **Zahler-Bentz, K., and Dukes, R. E.** The regulation of the affinity state of the N-formylated peptide receptor of neutrophils: the role of guanine nucleotide-binding proteins and the cytoskeleton. 105:2959.
— *See* Jesaitis, Naemura, Sklar, Cochrane, and Painter.
— *See* Sklar, Omann, and Painter.
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— *See* Simionescu, Simionescu, and Palade.
— *See* Simionescu, Simionescu, Santoro, and Palade.
— *See* Simionescu, Simionescu, Silbert, and Palade.
— *See* Sztul, Howell, and Palade.
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— *See* Mitchell, Saito, Palade, and Fleischer.
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— *See* Hepler and Palevitz.
— *See* Mishkind, Raikhel, Palevitz, and Keegstra.
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Pallini, V. *See* Baccetti, Burrini, Pallini, and Renieri.
Palm, S. L., and Furcht, L. T. Production of laminin and fibronectin by Schwannoma cells: cell-protein interactions in vitro and protein localization in peripheral nerve in vivo. 96:1218.
— *See* McCarthy, Palm, and Furcht.
Palmer, D. K., O'Day, K., Wener, M. H., Andrews, B. S., and Margolis, R. L. A 17-kD centromere protein (CENP-A) copurifies with nucleosome core particles and with histones. 104:805.
Palmer, K. C. *See* Roher, Palmer, Chau, and Ball.
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Palmiter, R. D. *See* Shepherd, Mulvihill, Thomas, and Palmiter.
Pan, B.-T., Teng, K., Wu, C., Adam, M., and Johnstone, R. M. Elec-

tron microscopic evidence for externalization of the transferrin receptor in vesicular form in sheep reticulocytes. 101:942.
Pande, H. *See* Borsi, Carnemolla, Castellani, Rosellini, Vecchio, Allemanni, Chang, Taylor-Papadimitriou, Pande, and Zardi.
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Panniers, R. *See* Kumar, Wolfman, Panniers, and Henshaw.
Pantazis, P., Lazarou, S. A., and Papadoupoulos, N. M. Isoenzymes of lactate dehydrogenase in human leukemic cells in culture treated with inducers of differentiation. 90:396.
Panton, L. J. *See* Howard, Lyon, Uni, Saul, Aley, Klotz, Panton, Sherwood, Marsh, Aikawa, and Rock.
Panula, P. *See* Rauvala, Merenmies, Pihlaskari, Korkolainen, Huhtala, and Panula.
Papadopoulos, V., and Hall, P. F. Isolation and characterization of protein kinase C from Y-1 adrenal cell cytoskeleton. 108:553.
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—, Binder, L. I., Bender, P. K., and Payne, M. R. Microtubule-associated protein 2 (MAP2) within axons of spinal motor neurons: associations with microtubules and neurofilaments in normal and β,β′-iminodipropionitrile-treated axons. 100:74.
—, Yoon, M., Crane, R., Autilio-Gambetti, L., and Gambetti, P. Redistribution of proteins of fast axonal transport following administration of β,β′-iminodipropionitrile: a quantitative autoradiographic study. 95:672.
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— *See* Nir, Cohen, and Papermaster.
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Parczyk, K. *See* Urban, Parczyk, Leutz, Kayne, and Kondor-Koch.
Pardee, J. D., Simpson, P. A., Stryer, L., and Spudich, J. A. Actin filaments undergo limited subunit exchange in physiological salt conditions. 94:316.
—, and Spudich, J. A. Mechanism of K^+-induced actin assembly. 93:648.
— *See* Yamamoto, Pardee, Reidler, Stryer, and Spudich.
Pardo, J. V., Siliciano, J. D'A., and Craig, S. W. Vinculin is a component of an extensive network of myofibril-sarcolemma attachment regions in cardiac muscle fibers. 97:1081.
Pardue, M. L. *See* Ayme-Southgate, Lasko, French, and Pardue.
— *See* Bendena, Garbe, Traverse, Lakhotia, and Pardue.
— *See* Fini, Bendena, and Pardue.
— *See* Saide, Chin-Bow, Hogan-Sheldon, Busquets-Turner, Vigoreaux, Valgeirsdottir, and Pardue.
— *See* Toffenetti, Mischke, and Pardue.
Pardue, R. L., Perry, G. W., Brady, R. C., and Dedman, J. R. Production of monoclonal antibodies against calmodulin by in vitro immunization of spleen cells. 96:1149.
— *See* Brinkley, Cox, Pepper, Wible, Brenner, and Pardue.
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— *See* Flicker, Peltz, Sheetz, Parham, and Spudich.
— *See* Peltz, Spudich, and Parham.
— *See* Simpson, Spudich, and Parham.
Pariset, C., Feinberg, J., Dacheux, J.-L., Øyen, O., Jahnsen, T., and Weinman, S. Differential expression and subcellular localization for subunits of cAMP-dependent protein kinase during RAM spermatogenesis. 109:1195.
Park, H. R. *See* Farach-Carson, Carson, Collier, Lennarz, Park, and Wright.
Park, L. P. *See* Markelonis, Oh, Park, Cha, Sofia, Kim, and Azari.
Park, R. D. *See* Ferris, Brown, Park, and Storrie.
Park, S. S. *See* Brands, Snider, Hino, Park, Gelboin, and Rothman.
Parks, G. D., Hull, J. D., and Lamb, R. A. Transposition of domains between the M^2 and HN viral membrane proteins results in polypeptides which can adopt more than one membrane orientation. 109:2023.
Parness, J., and Horwitz, S. B. Taxol binds to polymerized tubulin in vitro, 91:479.
— *See* Manfredi, Parness, and Horwitz.
Parodi, S. *See* Albini, Allavena, Melchiori, Giancotti, Richter, Comoglio, Parodi, Martin, and Tarone.
Parry, G., Cullen, B., Kaetzel, C. S., Kramer, R., and Moss, L. Regulation of differentiation and polarized secretion in mammary epithelial cells maintained in culture: extracellular matrix and membrane polarity influences. 105:2043
— *See* Lee, Parry, and Bissell.
Parsons, J. *See* Hayashi, Ninomiya, Parsons, Hayashi, Olsen, and Trelstad.
Parton, R. G., Prydz, K., Bomsel, M., Simons, K., and Griffiths, G. Meeting of the apical and basolateral endocytic pathways of the Madin-Darby canine kidney cell in late endosomes. 109:3259.
— *See* Bomsel, Prydz, Parton, Gruenberg, and Simons.
Parvinen, M. *See* Krawczyk, Mali, and Parvinen.
— *See* Mali, Sandberg, Vuorio, Yelick, Hecht, and Parvinen.
Parysek, L. M., Asnes, C. F., and Olmsted, J. B. MAP-4: occurrence in mouse tissues. 99:1309.
—, Wolosewick, J. J., and Olmsted, J. B. MAP 4: a microtubule-associated protein specific for a subset of tissue microtubules. 99:2287.
— *See* Eckert, Daley, and Parysek.
— *See* Kuczmarski, Tafuri, and Parysek.
Paschal, B. M., Shpetner, H. S., and Vallee, R. B. MAP 1C is a microtubule-activated ATPase which translocates microtubules in vitro and has dynein-like properties. 105:1273.
— *See* Shpetner, Paschal, and Vallee.
Paschetto, M. *See* Southwick, Dabiri, Paschetto, and Zigmond.
Pasdar, M., and Nelson, W. J. Kinetics of desmosome assembly in Madin-Darby canine kidney epithelial cells: temporal and spatial regulation of desmoplakin organization and stabilization upon cell-cell contact. I. Biochemical analysis. 106:677.
—, and Nelson, W. J. Kinetics of desmosome assembly in Madin-Darby canine kidney epithelial cells: temporal and spatial regulation of desmoplakin organization and stabilization upon cell-cell contact. II. Morphological analysis. 106:687.
—, and Nelson, W. J. Regulation of desmosome assembly in epithelial cells: kinetics of synthesis, transport, and stabilization of desmoglein I, a major protein of the membrane core domain. 109:163.
Pasion, S. G. *See* Rivera, Pasion, Wong, Fei, and Biswas.
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— *See* Rodriguez-Boulan, Paskiet, Salas, and Bard.
Pasquale, E. B. *See* Maher and Pasquale.
Pasquale, S. M., and Goodenough, U. W. Cyclic AMP functions as a primary sexual signal in gametes of *Chlamydomonas reinhardtii*. 105:2279.
Pasquali-Ronchetti, I. *See* Fornieri, Baccarani-Contri, Quaglino, and Pasquali-Ronchetti.
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— *See* Dickson, Willingham, and Pastan.
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Pasternak, C., and Elson, E. L. Lymphocyte mechanical response triggered by cross-linking surface receptors. 100:860.
—, Flicker, P. F., Ravid, S., and Spudich, J. A. Intermolecular versus intramolecular interactions of *Dictyostelium* myosin: possible regulation by heavy chain phosphorylation. 109:203.
Pasveer, F. J. *See* Van Haastert, Van Walsum, and Pasveer.
Patel, B. *See* Jones, Jackson, Price, Patel, Ohanion, Lear, and Critchley.
— *See* Kellie, Patel, Pierce, and Critchley.
Patel, B. A. *See* Bergeron, Resch, Rachubinski, Patel, and Posner.
— *See* Posner, Verma, Patel, and Bergeron.
Patel, J. *See* Tash, Krinks, Patel, Means, Klee, and Means.
Patel, V. P., and Fairbanks, G. Spectrin phosphorylation and shape change of human erythrocyte ghosts. 88:430.
—, and Lodish, H. F. A fibronectin matrix is required for differentiation of murine erythroleukemia cells into reticulocytes. 105:3105.
—, and Lodish, H. F. The fibronectin receptor on mammalian erythroid precursor cells: characterization and developmental regulation. 102:449.
— *See* Bernardi, Patel, and Lodish.
Paterson, B. M. *See* Hammer, Bowers, Paterson, and Korn.
Pathak, R. K., Luskey, K. L., and Anderson, R. G. W. Biogenesis of the crystalloid endoplasmic reticulum in UT-1 cells: evidence that newly formed endoplasmic reticulum emerges from the nuclear envelope. 102:2158.
—, Merkle, R. K., Cummings, R. D., Goldstein, J. L., Brown, M. S., and Anderson, R. G. W. Immunocytochemical localization of mutant low density lipoprotein receptors that fail to reach the Golgi complex. 106:1831.
Patil, N. *See* Roth, Gundersen, Patil, and Rodriguez-Boulan.
Patsalos, P. N., Bell, M. E., and Wiggins, R. C. Pattern of myelin breakdown during sciatic nerve Wallerian degeneration: Reversal of the order of assembly. 87:1.
Patterson, P. H. *See* Chiu, Matthew, and Patterson.
Pattillo, R. *See* Hoshina, Hussa, Pattillo, and Boime.
Patton, C. *See* Clapper, Davis, Lamothe, Patton, and Epel.
Patton, J. G., and Wieben, E. D. U1 precursors: variant 3′ flanking sequences are transcribed in human cells. 104:175.
Patz, A. *See* Glaser, D'Amore, Michels, Patz, and Fenselau.
Patzak, A., Böck, G., Fischer-Colbrie, R., Schauenstein, K., Schmidt, W., Lingg, G., and Winkler, H. Exocytotic exposure and retrieval

of membrane antigens of chromaffin granules: quantitative evaluation of immunofluorescence on the surface of chromaffin cells. 98:1817.
—, and Winkler, H. Exocytotic exposure and recycling of membrane antigens of chromaffin granules: ultrastructural evaluation after immunolabeling. 102:510.
Patzer, E. J., Schlossman, D. M., and Rothman, J. E. Release of clathrin from coated vesicles dependent upon a nucleoside triphosphate and a cytosol fraction. 93:230.
Paul, A.-L. *See* Herrin, Michaels, and Paul.
Paul, D. L. Molecular cloning of cDNA for rat liver gap junction protein. 103:123.
—, and Goodenough, D. A. In vitro synthesis and membrane insertion of bovine MP26, an integral protein from lens fiber plasma membrane. 96:633.
—, and Goodenough, D. A. Preparation, characterization, and localization of antisera against bovine MP26, an integral protein from lens fiber plasma membrane. 96:625.
— *See* Beyer, Kistler, Paul, and Goodenough.
— *See* Beyer, Paul, and Goodenough.
— *See* Goodenough, Paul, and Jesaitis.
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— *See* Kuettner, Memoli, Pauli, Wrobel, Thonar, and Daniel.
— *See* Kuettner, Pauli, Gell, Memoli, and Schenk.
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Paulson, H. L. *See* Claudio, Paulson, Green, Ross, Hartman, and Hayden.
Paulson, J. R., and Langmore, J. P. Low angle x-ray diffraction studies of HeLa metaphase chromosomes: the effects of histone phosphorylation and chromosome isolation procedure. 96:1132.
— *See* Langmore and Paulson.
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Paumgartner, D. *See* Bolender, Paumgartner, Muellener, Losa, and Weibel.
Pauza, C. D., and Price, T. M. Human immunodeficiency virus infection of T cells and monocytes proceeds via receptor-mediated endocytosis. 107:959.
Pavalko, F. M. *See* Roberts, Pavalko, and Ward.
— *See* Ward, Roberts, Strome, Pavalko, and Hogan.
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Pavco, P. A., and Van Tuyle, G. C. Purification and general properties of the DNA-binding protein (P16) from rat liver mitochondria. 100:258.
— *See* Van Tuyle and Pavco.
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Pavlath, G. K., and Blau, H. M. Expression of muscle genes in heterokaryons depends on gene dosage. 102:124.
Payne, G. S., Baker, D., van Tuinen, E., and Schekman, R. Protein transport to the vacuole and receptor-mediated endocytosis by clathrin heavy chain-deficient yeast. 106:1453.
— *See* Stevens, Rothman, Payne, and Schekman.
Payne, M. R. *See* Papasozomenos, Binder, Bender, and Payne.
Payne, R., and Fein, A. Inositol 1,4,5 trisphosphate releases calcium from specialized sites within *Limulus* photoreceptors. 104:933.
Pazirandeh, M. *See* Keller, Pazirandeh, and Krisans.
Pearl, M., Fishkind, D., Mooseker, M., Keene, D., and Keller, T., III. Studies on the spectrin-like protein from the intestinal brush border, TW 260/240, and characterization of its interaction with cytoskeleton and actin. 98:66.
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— *See* Sorger, Crowther, Finch, and Pearse.
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Pearson, T. W. *See* Roditi, Schwarz, Pearson, Beecroft, Liu, Richardson, Bühring, Pleiss, Bülow, Williams, and Overath.
Peattie, D. A., Alonso, R. A., Hein, A., and Caulfield, J. P. Ultrastructural localization of giardins to the edges of disk microribbons of *Giardia lamblia* and the nucleotide and deduced protein sequence of alpha giardin. 109:2323.
Pechak, D. G., Carrino, D. A., and Caplan, A. I. Electron microscopic characterization of chick embryonic skeletal muscle proteoglycans. 100:1767.
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Pedersen, R. A. *See* Glass, Aggeler, Spindle, Pedersen, and Werb.
— *See* Sorensen, Cyert, and Pedersen.
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Pedersen, S. E. *See* Bridgman, Carr, Pedersen, and Cohen.
Pederson, T. Nuclear RNA-protein interactions and messenger RNA processing. 97:1321.
—, and Davis, N. G. Messenger RNA processing and nuclear structure: Isolation of nuclear ribonucleoprotein particles containing β-globin messenger RNA precursors. 87:47.
— *See* Findly and Pederson.
— *See* Madore, Wieben, Kunkel, and Pederson.
— *See* Madore, Wieben, and Pederson.
— *See* Mayrand, Setyono, Greenberg, and Pederson.
— *See* Wieben, Madore, and Pederson.
Pehling, G. *See* Matus, Ng, Pehling, Ackerann, and Hauser.
— *See* Matus, Pehling, Ackermann, and Maeder.
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— *See* Guy, Leclerc, and Pelletier.
Pelloni, G. *See* Strehler, Pelloni, Heizmann, and Eppenberger.
Peltonen, J. *See* Jaakkola, Peltonen, and Uitto.
Peltz, G., Kuczmarski, E. R., and Spudich, J. A. *Dictyostelium* myosin: Characterization of chymotryptic fragments and localization of the heavy-chain phosphorylation site. 89:104.
—, Spudich, J. A., and Parham, P. Monoclonal antibodies against seven sites on the head and tail of *Dictyostelium* myosin. 100:1016.
— *See* Flicker, Peltz, Sheetz, Parham, and Spudich.
Pemrick, S. M., and Grebenau, R. C. Qualitative analysis of skeletal myosin as substrate of Ca^{2+}-activated neutral protease: comparison of filamentous and soluble, native, and L2-deficient myosin. 99:2297.
Peng, H. B. Cytoskeletal organization of the presynaptic nerve terminal and acetylcholine receptor cluster in cell cultures. 97:489.
— Participation of calcium and calmodulin in the formation of acetylcholine receptor clusters. 98:550.
—, and Froehner, S. C. Association of the postsynaptic 43K protein with newly formed acetylcholine receptor clusters in cultured muscle cells. 100:1698.
—, and Phelan, K. A. Early cytoplasmic specialization at the presumptive acetylcholine receptor cluster: a meshwork of thin filaments. 99:344.
— *See* Froehner, Murnane, Tobler, Peng, and Sealock.
— *See* Luther and Peng.
Peng, I., Binder, L. I., and Black, M. M. Biochemical and immunological analyses of cytoskeletal domains of neurons. 102:252.
Peng, S. S. *See* Robbins, Peng, and Marshall.
Penman, S. *See* Capco, Krochmalnic, and Penman.
— *See* Capco and Penman.
— *See* Fey, Krochmalnic, and Penman.
— *See* Fey, Wan, and Penman.
— *See* Fulton, Pri[illegible], Farmer, and Penman.
— *See* Prives, Fulton, Penman, Daniels, and Christian.
Penn, E. J., Burdett, I. D. J., Hobson, C., Magee, A. I., and Rees, D. A. Structure and assembly of desmosome junctions: biosynthesis and turnover of the major desmosome components of Madin-Darby canine kidney cells in low calcium medium. 105:2327.
—, Hobson, C., Rees, D. A., and Magee, A. I. Structure and assembly of desmosome junctions: biosynthesis, processing, and transport of the major protein and glycoprotein components in cultured epithelial cells. 105:57.
Pennell, R. I., Knox, J. P., Scofield, G. N., Selvendran, R. R., and Roberts, K. A family of abundant plasma membrane-associated glycoproteins related to the arabinogalactan proteins is unique to flowering plants. 108:1967.
Penningroth, S. M., Cheung, A., Olehnik, K., and Koslosky, R. Mechanochemical coupling in the relaxation of rigor-wave sea urchin sperm flagella. 92:733.
Penttinen, K. *See* Kaariainen, Hashimoto, Saraste, Virtanen, and Penttinen.
Penverne, B. *See* Nagy, Laporte, Penverne, and Hervé.
Pepe, F. A. *See* Chowrashi and Pepe.
— *See* Wachsberger and Pepe.
Pepper, D. *See* Brenner, Pepper, Berns, Tan, and Brinkley.
Pepper, D. A., Kim, H. Y., and Berns, M. W. Studies of a microtubule-associated protein using a monoclonal antibody elicited against mammalian mitotic spindles. 99:503.
— *See* Brinkley, Cox, Pepper, Wible, Brenner, and Pardue.
Pepper, M. S., Spray, D. C., Chanson, M., Montesano, R., Orci, L., and Meda, P. Junctional communications is induced in migrating capillary endothelial cells. 109:3027
—, Vassalli, J.-D., Montesano, R., and Orci, L. Urokinase-type plasminogen activator is induced in migrating capillary endothelial cells. 105:2535.
Pepperkok, R. *See* Rosa, Weiss, Pepperkok, Ansorge, Niehrs, Stelzer, and Huttner.

Peracchia, C., and Peracchia, L. L. Gap junction dynamics: Reversible effects of divalent cations. 87:708.
—, **and Peracchia, L. L.** Gap junction dynamics: Reversible effects of hydrogen ions. 87:719.
Peracchia, L. L. *See* Peracchia and Peracchia.
Perara, E., and Lingappa, V. R. A former amino terminal signal sequence engineered to an internal location directs translocation of both flanking protein domains. 101:2292.
— *See* Faust, Wall, Perara, Lingappa, and Kornfeld.
— *See* Simon, Perara, and Lingappa.
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Periasamy, M. *See* Wieczorek, Periasamy, Butler-Browne, Whalen, and Nadal-Ginard.
Perillo, N. *See* Snell, Kosfiszer, Clausell, Perillo, Imam, and Hunnicut.
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— *See* Orci, Ravazzola, Amherdt, Madsen, Perrelet, Vassalli, and Anderson.
— *See* Orci, Ravazzola, Amherdt, Yanaihara, Yanaihara, Halban, Renold, and Perrelet.
— *See* Thorens, Roth, Norman, Perrelet, and Orci.
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— *See* Grove, Cerny, Perriard, and Eppenberger.
— *See* Grove, Kurer, Lehner, Doetschman, Perriard, and Eppenberger.
— *See* Schäfer and Perriard.
Perris, R., and Johansson, S. Amphibian neural crest cell migration on purified extracellular matrix components: a chondroitin sulfate proteoglycan inhibits locomotion on fibronectin substrates. 105:2511.
Perrot-Applanat, M., Groyer-Picard, M.-T., Logeat, F., and Milgrom, E. Ultrastructural localization of the progesterone receptor by an immunogold method: effect of hormone administration. 102:1191.
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— *See* Abrahamson and Perry.
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— *See* Antonicek, Persohn, and Schachner.
— *See* Seilheimer, Persohn, and Schachner.
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Pesacreta, T. C., Byers, T. J., Dubreuil, R., Kiehart, D. P., and Branton, D. *Drosophila* spectrin: the membrane skeleton during embryogenesis. 108:1697.
—, **and Lucas, W. J.** Plasma membrane coat and a coated vesicle-associated reticulum of membranes: their structure and possible interrelationship in *Chara corallina*. 98:1537.
Pesciotta Peters, D. M., and Mosher, D. F. Localization of cell surface sites involved in fibronectin fibrillogenesis. 104:121.
Pesheva, P., Spiess, E., and Schachner, M. J1-160 and J1-180 are oligodendrocyte-secreted nonpermissive substrates for cell adhesion. 109:1765.
Peskoff, A. *See* Meyer, Yancey, Revel, and Peskoff.
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—, **and Simons, K.** Transcytosis of the G protein of vesicular stomatitis virus after implantation into the apical membrane of Madin-Darby canine kidney cells. I. Involvement of endosomes and lysosomes. 99:796.
—, **and Simons, K.** Transepithelial transport of a viral membrane glycoprotein implanted into the apical plasma membrane of Madin-Darby canine kidney cells. II. Immunological quantitation. 97:638.
— *See* Matlin, Bainton, Pesonen, Louvard, Genty, and Simons.
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Peters, K.-R., Carley, W. W., and Palade, G. E. Endothelial plasmalemmal vesicles have a characteristic striped bipolar surface structure. 101:2233.
—, **and Palade, G. E.** Fine structure of a periciliary ridge complex of frog retinal rod cells revealed by ultrahigh resolution scanning electron microscopy. 96:265.
Peters, P. D. *See* Saubermann, Beeuwkes, and Peters.
— *See* Saubermann, Echlin, Peters, and Beeuwkes.
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— *See* Hammel, Dvorak, Peters, Schulman, Dvorak, Lichtenstein, and Galli.
Petersen, O. W., and Van Deurs, B. Serial-section analysis of coated pits and vesicles involved in adsorptive pinocytosis in cultured fibroblasts. 96:277.
— *See* Sandvig, Olsnes, Brown, Petersen, and Van Deurs.
— *See* Sandvig, Olsnes, Petersen, and Van Deurs.
— *See* Van Deurs, Sandvig, Petersen, Olsnes, Simons, and Griffiths.
— *See* Van Deurs, Tønnessen, Petersen, Sandvig, and Olsnes.
Peterson, A. C., and Bray, G. M. Normal basal laminas are realized on dystrophic Schwann cells in dystrophic ↔ shiverer chimera nerves. 99:1831.
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— *See* Severinsson and Peterson.
Peterson, S. W., and Lerch, V. Inhibition of DNA synthesis in SV3T3 cultures by isolated 3T3 plasma membranes. 97:276.
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Pettersson, R. *See* Garoff, Kondor-Koch, Pettersson, and Burke.
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— *See* Howard, Petty, and McConnell.
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Pfaller, R., Steger, H. F., Rassow, J., Pfanner, N., and Neupert, W. Import pathways of precursor proteins into mitochondria: multiple receptor sites are followed by a common membrane insertion site. 107:2483.
Pfanner, N. *See* Pfaller, Steger, Rassow, Pfanner, and Neupert.
Pfeffer, L. M., Wang, E., and Tamm, I. Interferon effects on microfilament organization, cellular fibronectin distribution, and cell motility in human fibroblasts. 85:9.
— *See* Wang, Michl, Pfeffer, Silverstein, and Tamm.
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—, **Drubin, D. G., and Kelly, R. B.** Identification of three coated vesicle components as α- and β-tubulin linked to a phosphorylated 50,000-dalton polypeptide. 97:40.
—, **Huima, T., and Redman, C. M.** Biosynthesis of spectrin and its assembly into the cytoskeletal system of Friend erythroleukemia cells. 103:103.
—, **and Kelly, R. B.** Identification of minor components of coated vesicles by use of permeation chromatography. 91:385.
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—, **Ferrari, N., Tosetti, F., and Vidali, G.** Histone acetylation in conjugating *Tetrahymena thermophila*. 109:1007.
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Pfeiffer, J. R., Seagrave, J. C., Davis, B. H., Deanin, G. G., and Oliver, J. M. Membrane and cytoskeletal changes associated with IgE-mediated serotinin release from rat basophilic leukemia cells. 101:2145.
— *See* Oliver, Osborne, Pfeiffer, Child, and Berlin.
— *See* Oliver, Seagrave, Pfeiffer, Feibig, and Deanin.
— *See* Regula, Pfeiffer, and Berlin.
— *See* Walter, Berlin, Pfeiffer, and Oliver.
Pfeiffer, S., Fuller, S. D., and Simons, K. Intracellular sorting and basolateral appearance of the G protein of vesicular stomatitis virus in Madin-Darby canine kidney cells. 101:470.
— *See* Griffiths, Fuller, Back, Hollinshead, Pfeiffer, and Simons.
— *See* Griffiths, Pfeiffer, Simons, and Matlin.
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Nicolas, J.-F., Gaillard, J., Chevance, G., and Jacob, F. Differentiation of a teratocarcinoma line: Preferential development of cholinergic neurons. 88:57.
Pfenninger, K. H., and Johnson, M. P. Membrane biogenesis in the sprouting neuron. I. Selective transfer of newly synthesized phospholipid into the growing neurite. 97:1038.
—, **and Maylie-Pfenninger, M. F.** Lectin labeling of sprouting neurons. I. Regional distribution of surface glycoconjugates. 89:536.
—, **and Maylie-Pfenninger, M. F.** Lectin labeling of sprouting neurons. II. Relative movement and appearance of glycoconjugates during plasmalemmal expansion. 89:547.
— *See* Besharse and Pfenninger.
— *See* Ellis, Wallis, Abreu, and Pfenninger.
— *See* Greenberger and Pfenninger.
— *See* Hyman and Pfenninger.
— *See* Small, Blank, Ghez, and Pfenninger.
— *See* Small and Pfenninger.
— *See* Strichartz, Small, and Pfenninger.
— *See* Wallis, Ellis, Suh, and Pfenninger.
Pfister, K. K., Wagner, M. C., Stenoien, D. L., Brady, S. T., and Bloom, G. S. Monoclonal antibodies to kinesin heavy and light chains stain vesicle-like structures, but not microtubules, in cultured cells. 108:1453.
Phaire-Washington, L., Silverstein, S. C., and Wang, E. Phorbol myristate acetate stimulates microtubule and 10-nm filament extension and lysosome redistribution in mouse macrophages. 86:641.
—, **Wang, E., and Silverstein, S. C.** Phorbol myristate acetate stimulates pinocytosis and membrane spreading in mouse peritoneal macrophages. 86:634.
Phelan, K. A. *See* Peng and Phelan.
Philipson, L. *See* Dreyfuss, Philipson, and Mattaj.
Phillips, D. M. *See* Bouchard, Gagnon, Phillips, and Bardin.
Phillips, D. R., Jennings, L. K., and Edwards, H. H. Identification of membrane proteins mediating the interaction of human platelets. 86:77.
— *See* Boyles, Fox, Phillips, and Stenberg.
— *See* Fox, Boyles, Reynolds, and Phillips.
— *See* Isenberg, McEver, Phillips, Shuman, and Bainton.
Phillips, J. H., Burridge, K., Wilson, S. P., and Kirshner, N. Visualization of the exocytosis/endocytosis secretory cycle in cultured adrenal chromaffin cells. 97:1906.
Phillips, M. A., and Rice, R. H. Convergent differentiation in cultured rat cells from nonkeratinized epithelia: keratinocyte character and intrinsic differences. 97:686.
Phillips, M. J., Oda, M., Yousef, I. M., and Funatsu, K. Effects of cytochalasin B on membrane-associated microfilaments in a cell-free system. 91:524.
Philp, N. J., and Nachmias, V. T. Components of the cytoskeleton in the retinal pigmented epithelium of the chick. 101:358.
Philp, R. *See* Davies, Warwick, Totty, Philp, Helfrich, and Horton.
Piatigorsky, J. *See* Wistow, Lietman, Williams, Stapel, de Jong, Horwitz, and Piatigorsky.
Picard, A., Capony, J. P., Brautigan, D. L., and Dorée, M. Involvement of protein phosphatases 1 and 2A in the control of M phase-promoting factor (MPF) activity in starfish. 109:3347.
Picart, R. *See* Tougard, Louvard, Picart, and Tixier-Vidal.
Picker, L. J., Nakache, M., and Butcher, E. C. Monoclonal antibodies to human lymphocyte homing receptors define a novel class of adhesion molecules on diverse cell types. 109:927.
Pickering, S. J. *See* Houliston, Pickering, and Maro.
Pickett-Heaps, J. *See* Tippit, Pillus, and Pickett-Heaps.
Pickett-Heaps, J. D. *See* Leslie and Pickett-Heaps.
— *See* Spurck and Pickett-Heaps.
— *See* Tippit, Pickett-Heaps, and Leslie.
Picone, R., Kajtaniak, E. L., Nielsen, L. S., Behrendt, N., Mistronicola, M. R., Cubellis, M. V., Stoppelli, M. P., Pedersen, S., Danø, K., and Blasi, F. Regulation of urokinase receptor in monocytelike U937 cells by phorbol ester phorbol myristate acetate. 108:693.
Picquot, P. *See* Vantard, Lambert, De Mey, Picquot, and Van Eldik.
Pidard, D. *See* Okita, Pidard, Newman, Montgomery, and Kunicki.
Pidoux, I. *See* Poole and Pidoux.
— *See* Poole, Pidoux, Reiner, Choi, and Rosenberg.
— *See* Poole, Pidoux, Reiner, Cöster, and Hassell.
— *See* Poole, Pidoux, Reiner, and Rosenberg.
— *See* Poole, Pidoux, and Rosenberg.
Pieper, F. R., Schaart, G., Krimpenfort, P. J., Henderik, J. B., Moshage, H. J., van de Kemp, A., Ramaekers, F. C., Berns, A., and Bloemendal, H. Transgenic expression of the muscle-specific intermediate filament protein desmin in nonmuscle cells. 108:1009.
Pierce, D. A. *See* Cavagnaro, Pierce, Lucchesi, and Chae.
Pierce, E. J. *See* Kellie, Patel, Pierce, and Critchley.
Pierce, G. F., Mustoe, T. A., Lingelbach, J., Masakowski, V. R., Griffin, G. L., Senior, R. M., and Deuel, T. F. Platelet-derived growth factor and transforming growth factor-β enhance tissue repair activities by unique mechanisms. 109:429.
Pierce, M. Quantification of ganglioside GM_1 synthetase activity on intact chick neural retinal cells. 93:76.
Pierce, M. W. *See* Arnaout, Gupta, Pierce, and Tenen.
Pierschbacher, M. *See* Hayman, Engvall, A'Hearn, Barnes, Pierschbacher, and Ruoslahti.
Pierschbacher, M. D. *See* Argraves, Suzuki, Arai, Thompson, Pierschbacher, and Ruoslahti.
— *See* Cardarelli, Crispe, and Pierschbacher.
— *See* Cardarelli and Pierschbacher.
— *See* Cheresh, Pierschbacher, Herzig, and Mujoo.
— *See* Cheresh, Pytela, Pierschbacher, Klier, Ruoslahti, and Reisfeld.
— *See* Dedhar, Argraves, Suzuki, Ruoslahti, and Pierschbacher.
— *See* Dedhar, Ruoslahti, and Pierschbacher.
— *See* Gehlsen, Argraves, Pierschbacher, and Ruoslahti.
— *See* Hayman, Pierschbacher, and Ruoslahti.
Pietrini, G. *See* Borgese, Pietrini, and Meldolesi.
— *See* Meldolesi, Corte, Pietrini, and Borgese.
Piez, K. A. *See* Seyedin, Thompson, Rosen, and Piez.
Pifko-Hirst, S. *See* Horwitz, Chia, Harracksingh, Orlow, Pifko-Hirst, Schneck, Sorbara, Speaker, and Wilk.
Pigon, A. *See* Egyházi, Pigon, Ossoinak, Holst, and Tayip.
Pihlajaniemi, T. *See* Sandberg, Tammimen, Hirvonen, Vuorio, and Pihlajaniemi.
Pihlaskari, R. *See* Rauvala, Merenmies, Pihlaskari, Korkolainen, Huhtala, and Panula.
Pike, J. W. *See* Mangelsdorf, Koeffler, Donaldson, Pike, and Haussler.
Pike, M. C. and Snyderman, R. Alterations of new methylated phospholipid synthesis in the plasma membranes of macrophages exposed to chemoattractants. 91:221.
— *See* Snyderman, Pike, Edge, and Lane.
Pilch, P. F., Shia, M. A., Benson, R. J. J., and Fine, R. E. Coated vesicles participate in the receptor-mediated endocytosis of insulin. 96:133.
Pillus, L. *See* Tippit, Pillus, and Pickett-Heaps.
Pinçon-Raymond, M. *See* Daniloff, Crossin, Pinçon-Raymond, Murawsky, Rieger, and Edelman.
— *See* Nicolet, Pinçon-Raymond, and Rieger.
— *See* Rieger, Daniloff, Pinçon-Raymond, Crossin, Grumet, and Edelman.
— *See* Rieger, Nicolet, Pinçon-Raymond, Murawsky, Levi, and Edelman.
Pinder, J. C., and Gratzer, W. B. Structural and dynamic states of actin in the erythrocyte. 96:768.
Piñol-Roma, S., Swanson, M. S., Gall, J. G., and Dreyfuss, G. A novel heterogeneous nuclear RNP protein with a unique distribution on nascent transcripts. 109:2575.
Pinto da Silva, P., and Kan, F. W. K. Label-fracture: a method for high resolution labeling of cell surfaces. 99:1156.
—, **and Torrisi, M. R.** Freeze-fracture cytochemistry: partition of glycophorin in freeze-fractured human erythrocyte membranes. 93:463.
— *See* Aguas and Pinto da Silva.
— *See* Kan and Pinto da Silva.
— *See* Tadvalkar and Pinto da Silva.
— *See* Torrisi and Pinto da Silva.
Piotrowicz, R. S., Orchekowski, R. P., Nugent, D. J., Yamada, K. M., and Kunicki, T. J. Glycoprotein Ic-IIa functions as an activation-independent fibronectin receptor on human platelets. 106:1359.
— *See* Wayner, Carter, Piotrowicz, and Kunicki.
Piperno, G. Isolation of a sixth dynein subunit adenosine triphosphatase of *Chlamydomonas* axonemes. 106:133.
— Monoclonal antibodies to dynein subunits reveal the existence of cytoplasmic antigens in sea urchin egg. 98:1842.
—, **and Fuller, M. T.** Monoclonal antibodies specific for an acetylated form of α-tubulin recognize the antigen in cilia and flagella from a variety of organisms. 101:2085.
—, **Huang, B., Ramanis, Z., and Luck, D. J. L.** Radial spokes of *Chlamydomonas* flagella: Polypeptide composition and phosphorylation of stalk components. 88:73.
—, **LeDizet, M., and Chang, X.** Microtubules containing acetylated α-tubulin in mammalian cells in culture. 104:289.
— *See* Adams, Huang, Piperno, and Luck.
— *See* Bulinski, Richards, and Piperno.
— *See* Chang and Piperno.
— *See* Huang, Piperno, Ramanis, and Luck.
— *See* LeDizet and Piperno.
Piscopo, I. *See* Ungar, Piscopo, Letizia, and Holtzman.
Pitas, R. E., Boyles, J., Mahley, R. W., and Bissell, D. M. Uptake of chemically modified low density lipoproteins in vivo is mediated by specific endothelial cells. 100:103.
Pitelka, D. R., and Taggart, B. N. Mechanical tension induces lateral move-

ment of intramembrane components of the tight junction: studies on mouse mammary cells in culture. 96:606.
—, **Taggart, B. N., and Hamamoto, S. T.** Effects of extracellular calcium depletion on membrane topography and occluding junctions of mammary epithelial cells in culture. 96:613.
Pitot, H. C. *See* Mueckler and Pitot.
Pittenger, M. F., and Cleveland, D. W. Retention of autoregulatory control of tubulin synthesis in cytoplasts: demonstration of a cytoplasmic mechanism that regulates the level of tubulin expression. 101:1941.
Pizzey, J. A., Jones, G. E., and Walsh, F. S. Requirements for the Ca^{2+}-independent component in the initial intercellular adhesion of C2 myoblasts. 107:2307.
—, **Rowett, L. H., Barton, C. H., Dickson, G., and Walsh, F. S.** Intracellular adhesion mediated by human muscle neural cell adhesion molecule: effects of alternative exon usage. 109:3465.
Plant, A. L., Benson, D. M., and Smith, L. C. Cellular uptake and intracellular localization of benzo(a)pyrene by digital fluorescence imaging microscopy. 100:1295.
— *See* Benson, Bryan, Plant, Gotto, and Smith.
Plattner, H., Westphal, C., and Tiggemann, R. Cytoskeleton-secretory vesicle interactions during the docking of secretory vesicles at the cell membrane in *Paramecium tetraurelia* cells. 92:368.
— *See* Bilinski, Plattner, and Matt.
— *See* Momayezi, Lumpert, Kersken, Gras, Plattner, Krinks, and Klee.
— *See* Vilmart-Seuwen, Kersken, Stürzl, and Plattner.
— *See* Zieseniss and Plattner.
Pledger, W. J. *See* Herman and Pledger.
— *See* Singh, Chaikin, Pledger, Scher, and Stiles.
Pleiss, J. *See* Roditi, Schwarz, Pearson, Beecroft, Liu, Richardson, Bühring, Pleiss, Bülow, Williams, and Overath.
Plescia, J. *See* Plow, Freaney, Plescia, and Miles.
Pleshinger, J., and Weidner, E. The microsporidian spore invasion tube. IV. Discharge activation begins with pH-triggered Ca^{2+} influx. 100:1834.
Plesken, H. *See* Duszenko, Ivanov, Ferguson, Plesken, and Cross.
— *See* Rindler, Ivanov, Plesken, Rodriguez-Boulan, and Sabatini
— *See* Rindler, Ivanov, Plesken, and Sabatini.
Ploegh, H. L. *See* Neefjes, Verkerk, Broxterman, van der Marel, van Boom, and Ploegh.
Plow, E. *See* Duperray, Berthier, Chagnon, Ryckewaert, Ginsberg, Plow, and Marguerie.
Plow, E. F., Freaney, D. E., Plescia, J., and Miles, L. A. The plasminogen system and cell surfaces: evidence for plasminogen and urokinase receptors on the same cell type. 103:2411.
— *See* Ginsberg, Wencel, White, and Plow.
— *See* Shadle, Ginsberg, Plow, and Barondes.
— *See* Tranqui, Andrieux, Hudry-Clergeon, Ryckewaert, Soyez, Chapel, Ginsberg, Plow, and Marguerie.
Plumley, F. G. *See* Jensen, Herrin, Plumley, and Schmidt.
Plummer, D. J. *See* Klymkowsky and Plummer.
Plummer, K. K. *See* Rheinwald, Jorgensen, Hahn, Terpstra, O'Connell, and Plummer.
Plutner, H. *See* Mellman and Plutner.
— *See* Mellman, Plutner, Steinman, Unkeless, and Cohn.
— *See* Mellman, Plutner, and Ukkonen.
Pober, J. S. *See* Ewenstein, Warhol, Handin, and Pober.
— *See* Stolpen, Golan, and Pober.
Poccia, D. *See* Herlands, Allfrey, and Poccia.
— *See* Salik, Herlands, Hoffmann, and Poccia.
Pochapin, M. B. *See* Sanger, Mittal, Pochapin, and Sanger.
Podell, S. B., and Vacquier, V. D. Wheat germ agglutinin blocks the acrosomes reaction in *Stronglyocentrotus purpuratus* sperm by binding a 210,000-mol-wt membrane protein. 99:1598.
Podleski, T. R. *See* Horovitz, Knaack, Podleski, and Salpeter.
— *See* Knaack, Shen, Salpeter, and Podleski.
— *See* Salpeter, Spanton, Holley, and Podleski.
Podolsky, R. J. *See* Horowits, Maruyama, and Podolsky.
— *See* Horowits and Podolsky.
Poduslo, J. F. *See* Brunden and Poduslo.
Pohlhammer, K. *See* Flucher, Lenglachner-Bachinger, Pohlhammer, Adam, and Mollay.
Pohlig, G. *See* Roberts, Pohlig, Rothman, and Stevens.
Pohlmann, R. *See* Gieselmann, Pohlmann, Hasilik, and von Figura.
Poliard, A. M., Bernuau, D., Tournier, I., Legrès, L. G., Schoevaert, D., Feldmann, G., and Sala-Trepat, J. M. Cellular analysis by in situ hybridization and immunoperoxidase of alphafetoprotein and albumin gene expression in rat liver during the perinatal period. 103:777.
Polla, B. S., Bonventre, J. V., and Krane, S. M. 1, 25-Dihydroxyvitamin D_3 increases the toxicity of hydrogen peroxide in the human monocytic line U937: the role of calcium and heat shock. 107:373.
Pollack, G. H. *See* Suzuki and Pollack.
Pollack, L., and Atkinson, P. H. Correlation of glycosylation forms with position in amino acid sequence. 97:293.
—, **and Atkinson, P. H.** Correction. 101:1627.
Pollack, R. *See* Nicholson, Chen, Blanck, and Pollack.
— *See* Steinberg, Smith, Colozzo, and Pollack.
Pöllänen, J., Hedman, K., Nielsen, L. S., Danø, K., and Vaheri, A. Ultrastructural localization of plasma membrane-associated urokinase-type plasminogen activator at focal contacts. 106:87.
—, **Saksela, O., Salonen, E.-M., Andreasen, P., Nielsen, L., Danø, K., and Vaheri, A.** Distinct localizations of urokinase-type plasminogen activator and its type 1 inhibitor under cultured human fibroblasts and sarcoma cells. 104:1085.
— *See* Stephens, Pöllänen, Tapiovaara, Leung, Sim, Salonen, Rønne, Behrendt, Danø, and Vaheri.
Pollard, J. W. *See* Chamberlain, Pollard, and Stanners.
Pollard, T. D. Polymerization of ADP-actin. 99:769.
— Purification of a high molecular weight actin filament gelation protein from *Acanthamoeba* that shares antigenic determinants with vertebrate spectins. 99:1970.
— Rate constants for the reactions of ATP- and ADP-actin with the ends of actin filaments. 103:2747.
— Structure and polymerization of *Acanthamoeba* myosin-II filaments. 95:816.
—, **and Mooseker, M. S.** Direct measurement of actin polymerization rate constants by electron microscopy of actin filaments nucleated by isolated microvillus cores. 88:654.
— *See* Aebi, Fowler, Isenberg, Pollard, and Smith.
— *See* Carboni, Conzelman, Adams, Kaiser, Pollard, and Mooseker.
— *See* Cooper, Blum, and Pollard.
— *See* Dang, Yang, and Pollard.
— *See* Earnshaw, Sullivan, Machlin, Cooke, Kaiser, Pollard, Rothfield, and Cleveland.
— *See* Hagen, Kiehart, Kaiser, and Pollard.
— *See* Herman, Crisona, and Pollard.
— *See* Herman and Pollard.
— *See* Kaiser, Sato, Ebert, and Pollard.
— *See* Kiehart, Kaiser, and Pollard.
— *See* Kiehart and Pollard.
— *See* MacLean-Fletcher and Pollard.
— *See* Maupin and Pollard.
— *See* Mooseker, Pollard, and Wharton.
— *See* Murphy, Gray, Grasser, and Pollard.
— *See* Rimm and Pollard.
— *See* Rimm, Sinard, and Pollard.
— *See* Sato, Schwarz, Selden, and Pollard.
— *See* Sinard and Pollard.
— *See* Sinard, Stafford, and Pollard.
— *See* Tseng and Pollard.
— *See* Tseng, Runge, Cooper, Williams, and Pollard.
— *See* Vandekerckhove, Kaiser, and Pollard.
Pollerberg, E. G., Sadoul, R., Goridis, C., and Schachner, M. Selective expression of the 180 kD component of the neural cell adhesion molecule N-CAM during development. 101:1921.
Pollesello, P. *See* de Bernard, Bianco, Bonucci, Costantini, Lunazzi, Martinuzzi, Modricky, Moro, Panfili, Pollesello, Stagni, and Vittur.
Pollock, R. A. *See* Horwich, Kalousek, Fenton, Furtak, Pollock, and Rosenberg.
Polonoff, E. *See* Kabat, Gliniak, Rohrschneider, and Polonoff.
Poltorak, M., Sadoul, R., Keilhauer, G., Landa, C., Fahrig, T., and Schachner, M. Myelin-associated glycoprotein, a member of the L2/HNK-1 family of neural cell adhesion molecules, is involved in neuron-oligodendrocyte and oligodendrocyte-oligodendrocyte interaction. 105:1893.
Pomerantz, S. H. *See* Halaban, Pomerantz, Marshall, Lambert, and Lerner.
Pomeroy, S. L., and Purves, D. Neuron/glia relationships observed over intervals of several months in living mice. 107:1167.
Pon, L., Moll, T., Vestweber, D., Marshallsay, B., and Schatz, G. Protein import into mitochondria: ATP-dependent protein translocation activity in a submitochondrial fraction enriched in membrane contact sites and specific protein. 109:2603.
— *See* Hwang, Jascur, Vestweber, Pon, and Schatz.
Ponce, P. *See* Rojkind, Gatmaitan, Mackensen, Giambrone, Ponce, and Reid.
Ponte, P. *See* Neufeld, Mitchell, Ponte, and Gospodarowicz.
Poo, M. *See* Chow and Poo.
Poo, M.-M. *See* McCloskey, Liu, and Poo.
— *See* McCloskey and Poo.
Pool, R. R., Jr. *See* Storrie, Pool, Sachdeva, Maurey, and Oliver.
Poole, A. R., and Pidoux, I. Immunoelectron microscopic studies of type X collagen in endochondral ossification. 109:2547.

—, **Pidoux, I., Reiner, A., Choi, H., and Rosenberg, L. C.** Association of an extracellular protein (chondrocalcin) with the calcification of cartilage in endochondral bone formation. 98:54.
—, **Pidoux, I., Reiner, A., Cöster, L., and Hassell, J. R.** Mammalian eyes and associated tissues contain molecules that are immunologically related to cartilage proteoglycan and link protein. 93:910.
—, **Pidoux, I., Reiner, A., and Rosenberg, L.** An immunoelectron microscope study of the organization of proteoglycan monomer, link protein, and collagen in the matrix of articular cartilage. 93:921.
—, **Pidoux, I., and Rosenberg, L.** Role of proteoglycans in endochondral ossification: immunofluorescent localization of link protein and proteoglycan monomer in bovine fetal epiphyseal growth plate. 92:249.
— *See* Hinek, Reiner, and Poole.
Poole, B., and Ohkuma, S. Effect of weak bases on the intralysosomal pH in mouse peritoneal macrophages. 90:665.
— *See* Ohkuma, Chudzik, and Poole.
— *See* Ohkuma and Poole.
Poole, T. J. *See* Boucat, Darribère, Poole, Aoyama, Yamada, and Thiery.
Pope, B. *See* Way, Gooch, Pope, and Weeds.
Pope, F. M. *See* Jones and Pope.
Popov, D. *See* Ghinea, Fixman, Alexandru, Popov, Hasu, Ghitescu, Eskenasy, Simionescu, and Simionescu.
— *See* Rosenfeld, Kreibich, Popov, Kato, and Sabatini.
Poppleton, H. *See* Postlethwaite, Raghow, Stricklin, Poppleton, Seyer, and Kang.
Poritz, M. A. *See* Hann, Poritz, and Walter.
Porrello, K., and Burnside, B. Regulation of reactivated contraction in teleost retinal cone models by calcium and cAMP. 98:2230.
—, **Cande, W. Z., and Burnside, B.** *N*-Ethylmaleimide-modified subfragment-1 and heavy meromyosin inhibit reactivated contraction in motile models of retinal cones. 96:449.
— *See* Burnside, Smith, Nagata, and Porrello.
Porter, D. C. *See* Vacquier, Moy, Trimmer, Ebina, and Porter.
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Porter, K. R. An informal tribute to George E. Palade. 97:D1.
— *See* Ellisman and Porter.
— *See* McNiven and Porter.
— *See* Schliwa, Nakamura, Porter, and Euteneuer.
— *See* Schliwa, Weber, and Porter.
— *See* Westermark and Porter.
Porter, S. *See* Ratner, Elbein, Bunge, Porter, Bunge, and Glaser.
Porter-Jordan, K. *See* Benson, Porter-Jordan, Buoniconti, and Fine.
Portnoy, D. A. *See* Tilney and Portnoy.
Poruchynsky, M. S., and Atkinson, P. H. Primary sequence domains required for the retention of rotavirus VP7 in the endoplasmic reticulum. 107:1697.
—, **Tyndall, C., Both, G. W., Sato, F., Bellamy, A. R., and Atkinson, P. H.** Deletions into an NH_2-terminal hydrophobic domain result in secretion of rotavirus VP7, a resident endoplasmic reticulum membrane glycoprotein. 101:2199.
Posner, B. I., Verma, A. K., Patel, B. A., and Bergeron, J. J. M. Effect of colchicine on the uptake of prolactin and insulin into Golgi fractions of rat liver. 93:560.
— *See* Bergeron, Rachubinski, Sikstrom, Posner, and Paiement.
— *See* Bergeron, Resch, Rachubinski, Patel, and Posner.
— *See* Lai, Cameron, Doherty, Posner, and Bergeron.
— *See* Lai, Cameron, Wada, Doherty, Kay, Posner, and Bergeron.
Postlethwaite, A E., Raghow, R., Stricklin, G. P., Poppleton, H., Seyer, J. M., and Kang, A. H. Modulation of fibroblast functions by interleukin 1: increased steady-state accumulation of type I procollagen mRNAs and stimulation of other functions but not chemotaxis by human recombinant interleukin 1α and β. 106:311.
Potts, J. T., Jr. *See* Habener, Maunus, Dee, and Potts.
Pouphile, M. *See* Beisson, Cohen, Lefort-Tran, Pouphile, and Rossignol.
— *See* Lefort-Tran, Aufderheide, Pouphile, Rossignol, and Beisson.
Pouysségur, J. *See* Cosson, de Curtis, Pouysségur, Griffiths, and Davoust.
Powell, M. A. *See* Glenney, Tack, and Powell.
Powell, S. K., Orci, L., Craik, C. S., and Moore, H.-P. H. Efficient targeting to storage granules of human proinsulins with altered propeptide domain. 106:1843.
Powers, E. A. *See* Leach, Powers, Ruff, Jaken, and Kaufmann.
Powers, S. *See* Murphy, Powers, and Cantor.
Pozzan, T., Arslan, P., Tsien, R. Y., and Rink, T. J. Anti-immunoglobulin, cytoplasmic free calcium, and capping in B-lymphocytes. 94:335.
—, **Gatti, G., Dozzio, N., Vicentini, L. M., and Meldolesi, J.** Ca^{2+}-dependent and -independent release of neurotransmitters from PC12 cells: a role for protein kinase C activation? 99:628.
— *See* Hashimoto, Bruno, Lew, Pozzan, Volpe, and Meldolesi.
— *See* Iacopetta, Carpentier, Pozzan, Lew, Gorden, and Orci.
— *See* Lew, Monod, Waldvogel, Dewald, Baggiolini, and Pozzan.
— *See* Lew, Wollheim, Waldvogel, and Pozzan.
— *See* Malgaroli, Milani, Meldolesi, and Pozzan.
— *See* Rink, Tsien, and Pozzan.
— *See* Tsien, Pozzan, and Rink.
— *See* Vicentini, Ambrosini, Di Virgilio, Pozzan, and Meldolesi.
Pradel, L.-A. *See* Kordeli, Cartaud, Nghiêm, Pradel, Dubreuil, Paulin, and Changeux.
Prado-Figueroa, M. *See* Amar-Costesec, Prado-Figueroa, Beaufay, Nagelkerke, and van Berkel.
Prakash, K. *See* Harnik-Ort, Prakash, Marcantonio, Colman, Rosenfeld, Adesnik, Sabatini, and Kreibich.
Prasad, K. *See* Heuser, Keen, Amende, Lippoldt, and Prasad.
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Prat, M. *See* Tarone, Galetto, Prat, and Comoglio.
Pratcheva, D. D. *See* Huttner, Barbosa, Scangos, Pratcheva, and Ruddle.
Pratt, B. M. *See* Madri, Pratt, and Tucker.
Pratt, L. H. *See* McCurdy and Pratt.
Pratt, M. M. Stable complexes of axoplasmic vesicles and microtubules: protein composition and ATPase activity. 103:957.
—, **Otter, T., and Salmon, E. D.** Dynein-like Mg^{2+}-ATPase in mitotic spindles isolated from sea urchin embryos (*Strongylocentrotus droebachiensis*). 86:738.
— *See* Dentler, Pratt, and Stephens.
Predescu, D., Simionescu, M., Simionescu, N., and Palade, G. E. Binding and transcytosis of glycoalbumin by the microvascular endothelium of the murine myocardium: evidence that glycoalbumin behaves as a bifunctional ligand. 107:1729.
Prediger, E. A. *See* Murray, Hemperly, Prediger, Edelman, and Cunningham.
— *See* Murray, Owens, Prediger, Crossin, Cunningham, and Edelman.
Prem Das, O., and Henderson, E. J. Developmental regulation of *Dictyostelium discoideum* plasma membrane proteins. 97:1544.
Prescott, D. M. *See* Roth, Lin, and Prescott.
Presky, D. H., and Schonbrunn, A. Receptor-bound somatostatin and epidermal growth factor are processed differently in GH_4C_1 rat pituitary cells. 102:878.
Press, W. *See* Bruns, Press, Engvall, Timpl, and Gross.
Pressman, B. C. *See* Rubin, Lyubkin, and Pressman.
— *See* Suchard, Lattanzio, Rubin, and Pressman.
Presta, M., Maier, J. A. M., and Ragnotti, G. The mitogenic signaling pathway but not the plasminogen activator-inducing pathway of basic fibroblast growth factor is mediated through protein kinase C in fetal bovine aortic endothelial cells. 109:1877.
Preston, R. A., Murphy, R. F., and Jones, E. W. Apparent endocytosis of fluorescein isothiocyanate-conjugated dextran by *Saccharomyces cerevisiae* reflects uptake of low molecular weight impurities, not dextran. 105:1981.
Preston, S. F., Regula, C. S., Sager, P. R., Pearson, C. B., Daniels, L. S., Brown, P. A., and Berlin, R. D. Glycosaminoglycan synthesis is depressed during mitosis and elevated during early G1. 101:1086.
Preston, Y. A. *See* Schneider, Sellers, Vahey, Preston, and Adelstein.
Prettyman, R. *See* Sussman, Prettyman, and O'Brien.
Price, C. A. *See* Zielinski and Price.
Price, D. L. *See* Griffin, Price, Drachman, and Morris.
— *See* Hoffman, Griffin, and Price.
— *See* Hoffman, Thompson, Griffin, and Price.
— *See* Tennekoon, Frangia, Aitchison, and Price.
Price, G. J. *See* Jones, Jackson, Price, Patel, Ohanion, Lear, and Critchley.
Price, M. *See* Deutsch, Taylor, and Price.
Price, M. G. Skelemins: cytoskeletal proteins located at the periphery of M-discs in mammalian striated muscle. 104:1325.
—, **and Lazarides, E.** Expression of the intermediate filament-associated proteins paranemin and synemin in chicken development. 97:1860.
Price, T. M. *See* Finlay, Newmeyer, Price, and Forbes.
— *See* Pauza and Price.
Prieels, J. P. *See* Finne, Burger, and Prieels.
Primakoff, P., Hyatt, H., and Myles, D. G. A role for the migrating sperm surface antigen PH-20 in guinea pig sperm binding to the egg zona pellucida. 101:2239.
—, **Hyatt, H., and Tredick-Kline, J.** Identification and purification of a sperm surface protein with a potential role in sperm-egg membrane fusion. 104:141.
— *See* Cowan, Primakoff, and Myles.
— *See* Myles and Primakoff.
— *See* Myles, Primakoff, and Koppel.
Primavera, M. V. *See* Marchisio, Cirillo, Naldini, Primavera, Teti, and Zambonin-Zallone.
Pringault, E. *See* Arpin, Pringault, Finidori, Garcia, Jeltsch, Vandekerckhove, and Louvard.

Pringle, J. R. *See* Adams and Pringle.
— *See* Jacobs, Adams, Szaniszlo, and Pringle.
— *See* Sloat, Adams, and Pringle.
Prives, J., Fulton, A. B., Penman, S., Daniels, M. P., and Christian, C. N. Interaction of the cytoskeleton framework with acetylcholine receptor on the surface of embryonic muscle cells in culture. 92:231.
— *See* Bar-Sagi and Prives.
— *See* Fulton, Prives, Farmer, and Penman.
— *See* Ross, Rapuano, and Prives.
Prochniewicz-Nakayama, E., Yanagida, T., and Oosawa, F. Studies on conformation of F-actin in muscle fibers in the relaxed state, rigor, and during contraction using fluorescent phalloidin. 97:1663.
Prochownik, E. V., O'Rourke, K., and Dixit, V. M. Expression and analysis of COOH-terminal deletions of the human thrombospondin molecule. 109:843.
Prodouz, K. N. *See* Painter, Prodouz, and Gaarde.
Prpic, V., Uhing, R. J., Weiel, J. E., Jakoi, L., Gawdi, G., Herman, B., and Adams, D. O. Biochemical and functional responses stimulated by platelet-activating factor in murine peritoneal macrophages. 107:363.
Prum, B. E. *See* Burgess and Prum.
Pruslin, F. H. *See* Rodman, Pruslin, Hoffmann, and Allfrey.
Pruss, R. M. *See* Mirsky, Winter, Abney, Pruss, Gavrilovic, and Raff.
Prussak-Wieckowska, T. *See* Kaput, Brandriss, and Prussak-Wieckowska.
Pryde, J. G. *See* Lucocq, Pryde, Berger, and Warren.
Prydz, K. *See* Bomsel, Prydz, Parton, Gruenberg, and Simons.
— *See* Parton, Prydz, Bomsel, Simons, and Griffiths.
Pryer, N. K. *See* Cassimeris, Pryer, and Salmon.
— *See* Walker, O'Brien, Pryer, Soboeiro, Voter, Erickson, and Salmon.
Prystowsky, M. B. *See* Lee, Sabath, Deutsch, and Prystowsky.
Prywes, R. *See* Livneh, Benveniste, Prywes, Felder, Kam, and Schlessinger.
Przbylski, R. J. *See* MacBride and Przbylski.
Przybyla, A. *See* Kim, Shuman, Sette, and Przybyla.
Puddington, L., Machamer, C. E., and Rose, J. K. Cytoplasmic domains of cellular and viral integral membrane proteins substitute for the cytoplasmic domain of the vesicular stomatitis virus glycoprotein in transport to the plasma membrane. 102:2147.
— *See* Scullion, Hou, Puddington, Rose, and Jacobson.
Pukac, L. A. *See* Castellot, Pukac, Caleb, Wright, and Karnovsky.
Pullman, J. M., and Martin, T. E. Reconstitution of nucleoprotein complexes with mammalian heterogeneous nuclear ribonucleoprotein core proteins. 97:99.
Pumplin, D. W. Acetylcholine receptor clusters of rat myotubes have at least three domains with distinctive cytoskeletal and membranous components. 109:739.
—, **and Bloch, R. J.** Disruption and reformation of the acetylcholine receptor clusters of cultured rat myotubes occur in two distinct steps. 104:97.
—, **and Bloch, R. J.** Lipid domains of acetylcholine receptor clusters detected with saponin and filipin. 97:1043.
—, **and Fambrough, D. M.** ($Na^+ + K^+$)-ATPase correlated with a major group of intramembrane particles in freeze-fracture replicas of cultured chick myotubes. 97:1214.
— *See* Baetscher, Pumplin, and Bloch.
Purchio, A. F. *See* Erikson, Purchio, Erikson, Collett, and Brugge.
Purich, D. L. *See* Joly, Flynn, and Purich.
Purves, D. *See* Pomeroy and Purves.
Puszkin, S. *See* Gordon, Williams, and Puszkin.
— *See* Kohtz, Georgieva-Hanson, Kohtz, Schook, and Puszkin.
Putney, J. W., Jr. *See* Leslie and Putney.
Putnoky, P., Grosskopf, E., Cam Ha, D. T., Kiss, G. B., and Kondorosi, A. *Rhizobium fix* genes mediate at least two communication steps in symbiotic nodule development. 106:597.
Puvion, E. *See* Mähl, Lutz, Puvion, and Fuchs.
— *See* Smith, Puvion, Buchholtz, and Berezney.
Pyne, K. *See* Dvorak, Hammel, Schulman, Peters, MacGlashan, Schleimer, Newball, Pyne, Dvorak, Lichtenstein, and Galli.
— *See* Galli, Dvorak, Marcum, Ishizaka, Nabel, Der Simonian, Pyne, Goldin, Rosenberg, Cantor, and Dvorak.
Pypaert, M. *See* Smythe, Pypaert, Lucocq, and Warren.
Pytela, R. *See* Cheresh, Pytela, Pierschbacher, Klier, Ruoslahti, and Reisfeld.
— *See* Wiche, Krepler, Artlieb, Pytela, and Denk.

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Quaglino, D., Jr. *See* Fornieri, Baccarani-Contri, Quaglino, and Pasquali-Ronchetti.
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— *See* Trapp and Quarles.
— *See* Trapp, Quarles, and Griffin.
— *See* Trapp, Quarles, and Suzuki.
Quaroni, A. Crypt cell development in newborn rat small intestine. 100:1601.
— Development of fetal rat intestine in organ and monolayer culture. 100:1611.
— *See* Marxer, Stieger, Quaroni, Kashgarian, and Hauri.
Quarto, N. *See* Moscatelli and Quarto.
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— *See* Tacchetti, Quarto, Nitsch, Hartmann, and Cancedda.
Queally, S. A. *See* Lin and Queally.
Quigley, J. P. *See* Fairbairn, Gilbert, Ojakian, Schwimmer, and Quigley.
— *See* Fletcher, Quigley, Bauer, and Noe.
Quillen, M., Castello, C., Krishan, A., and Rubin, R. W. Cell surface tubulin in leukemic cells: molecular structure, surface binding, turnover, cell cycle expression, and origin. 101:2345.
Quinlan, R. A., and Stewart, M. Crystalline tubes of myosin subfragment-2 showing the coiled-coil and molecular interaction geometry. 105:403.
— *See* Stewart, Quinlan, and Moir.
Quinn, P., Griffiths, G., and Warren, G. Density of newly-synthesized plasma membrane proteins in intracellular membranes. II. Biochemical studies. 98:2142.
—, **Griffiths, G., and Warren, G.** Dissection of the Golgi complex. II. Density separation of specific Golgi functions in virally infected cells treated with monensin. 96:851.
— *See* Griffiths, Quinn, and Warren.
— *See* Griffiths, Warren, Quinn, Mathjeu-Costello, and Hoppeler.
Quintart, J., Courtoy, P. J., and Baudhuin, P. Receptor-mediated endocytosis in rat liver: purification and enzymic characterization of low density organelles involved in uptake of galactose-exposing proteins. 98:877.
— *See* Courtoy, Quintart, and Baudhuin.
— *See* Draye, Courtoy, Quintart, and Baudhuin.
Qureshi, S. A. *See* Reddy, Qureshi, Hollenberg, and Reddy.
— *See* Reddy, Rao, Qureshi, Reddy, Scarpelli, and Lalwani.

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Rabbege, J. R. *See* Aikawa, Miller, Rabbege, and Epstein.
Rabbitts, T. H. *See* Mechler and Rabbitts.
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Rachubinski, R. *See* Bergeron, Kotwal, Levine, Bilan, Rachubinski, Hamilton, Shore, and Ghosh.
— *See* Bergeron, Resch, Rachubinski, Patel, and Posner.
Rachubinski, R. A., Fujiki, Y., Mortensen, R. M., and Lazarow, P. B. Acyl-CoA oxidase and hydratase-dehydrogenase, two enzymes of the peroxisomal β-oxidation system, are synthesized on free polysomes of clofibrate-treated rat liver. 99:2241.
—, **Verma, D. P. S., and Bergeron, J. J. M.** Synthesis of rat liver microsomal cytochrome b_5 by free ribosomes. 84:705.
— *See* Bergeron, Rachubinski, Sikstrom, Posner, and Paiement.
— *See* Paiement, Rachubinski, Ng Ying Kin, Sikstrom, and Bergeron.
Racine, L. *See* Haeuptle, Suard, Bogenmann, Reggio, Racine, and Kraehenbuhl.
Radanyiu, C. *See* Gasc, Renoir, Radanyiu, Joab, Tuohimaa, and Baulieu.
Radermacher, M. *See* Saito, Inui, Radermacher, Frank, and Fleischer.
Radke, K., Carter, V. C., Moss, P., Dehazya, P., Schliwa, M., and Martin, G. S. Membrane association of a 36,000-dalton substrate for tyrosine phosphorylation in chicken embryo fibroblasts transformed by avian sarcoma viruses. 97:1601.
Raeymaekers, L. *See* Ferguson, Young, Raeymaekers, and Kranias.
Raff, E. C. Genetics of microtubule systems. 99:1.
— *See* Fuller, Caulton, Hutchens, Kaufman, and Raff.
Raff, J. W., and Glover, D. M. Nuclear and cytoplasmic cycles continue in *Drosophila* embryos in which DNA synthesis in inhibited with aphidicolin. 107:2009.
Raff, M. C. *See* ffrench-Constant, Miller, Kruse, Schachner, and Raff.
— *See* Hart, Richardson, Bolsover, and Raff.
— *See* Mirsky, Winter, Abney, Pruss, Gavrilovic, and Raff.
Rafferty, C. M. *See* Carey, Rafferty, and Todd.
— *See* Carey, Todd, and Rafferty.
Raghavan, V. Distribution of poly(A)-containing RNA during normal pollen development and during induced pollen embryogenesis in *Hyoscyamus niger*. 89:593.
Raghow, R. *See* Postlethwaite, Raghow, Stricklin, Poppleton, Seyer, and Kang.
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Raines, E. *See* Vogel, Ross, and Raines.

Raines, E. W. *See* Hanai, Kato, Matsuhashi, Morita, Raines, and Ross.
Rajpara, S. M. *See* Staatz, Rajpara, Wayner, Carter, and Santoro.
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— *See* Gu, Ralston, Murphy-Erdosh, Black, and Hall.
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Ramaekers, F. C. *See* Pieper, Schaart, Krimpenfort, Henderik, Moshage, van de Kemp, Ramaekers, Berns, and Bloemendal.
Raman, R. K. *See* Van Nest, MacDonald, Raman, and Rutter.
Ramanathan, R., Sa..mi, Y., Peterson, J. B., Nelson, D. L., and Kung, C. Antibodies to the ciliary membrane of *Paramecium tetraurelia* alter membrane excitability. 97:1421.
— *See* Adoutte, Ramanathan, Lewis, Dute, Ling, Kung, and Nelson.
— *See* Eisenbach, Ramanathan, and Nelson.
Ramanis, Z. *See* Huang, Piperno, Ramanis, and Luck.
— *See* Piperno, Huang, Ramanis, and Luck.
— *See* Segal, Huang, Ramanis, and Luck.
Rambaldi, I. *See* Matthieu, Roch, Omlin, Rambaldi, Almazan, and Braun.
Rambo, C. O., and Szego, C. M. Estrogen action at endometrial membranes: alterations in luminal surface detectable within seconds. 97:679.
Ramirez-Mitchell, R. *See* Wang and Ramirez-Mitchell.
Ramón, F. *See* Zampighi, Kreman, Ramón, Moreno, and Simon.
Randall, R. E. *See* Ng, Randall, and Lamb.
Randriamampita, C., and Trautman, A. Ionic channels in murine macrophages. 105:761.
Rannels, D. E. *See* Besterman, Airhart, Low, and Rannels.
Ranscht, B. Sequence of contactin, a 130-kD glycoprotein concentrated in areas of interneuronal contact, defines a new member of the immunoglobin supergene family in the nervous system. 107:1561.
—, **Moss, D. J., and Thomas, C.** A neuronal surface glycoprotein associated with the cytoskeleton. 99:1803.
Rao, G. H. R. *See* Cox, Carroll, White, and Rao.
Rao, K. *See* Klausner, van Renswoude, Kempf, Rao, Bateman, and Robbins.
— *See* Weissman, Klausner, Rao, and Harford.
Rao, M. S., Reddy, M. K., Reddy, J. K., and Scarpelli, D. G. Response of chemically induced hepatocytelike cells in hamster pancreas to methyl clofenapate, a peroxisome proliferator. 95:50.
— *See* Reddy, Rao, Qureshi, Reddy, Scarpelli, and Lalwani.
Rao, M. V. N. Cell population heterogeneity in the inducibility of DNA synthesis in human deploid fibroblasts. 89:194
Rao, P. N., and Satya-Prakash, K. L. Inducers of DNA synthesis: levels higher in transformed cells that in normal cells. 96:571.
—, **and Smith, M. L.** Differential response of cycling and noncycling cells to inducers of DNA synthesis and mitosis. 88:649.
— *See* Adlakha, Sahasrabuddhe, Wright, and Rao.
— *See* Adlakha, Shipley, Zhao, Jones, Wright, Rao, and Sauer.
— *See* Hanks and Rao.
Raper, J. A. *See* Chang, Rathjen, and Raper.
Raper, S. E. *See* Burwen, Barker, Goldman, Hradek, Raper, and Jones.
Rapoport, J., Kachadorian, W. A., Muller, J., Franki, N., and Hays, R. M. Stabilization of vasopressin-induced membrane events by bifunctional imidoesters. 89:261.
— *See* Hays, Bourguet, Satir, Franki, and Rapoport.
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Rapp, S. *See* Noegel, Rapp, Lottspeich, Schleicher, and Stewart.
Rappaport, R. *See* Devore, Conrad, and Rappaport.
Rapraeger, A. Transforming growth factor (type β) promotes the addition of chondroitin sulfate chains to the cell surface proteoglycan (syndecan) of mouse mammary epithelia. 109:2509.
—, **Jalkanen, M., and Bernfield, M.** Cell surface proteoglycan associates with the cytoskeleton at the basolateral cell surface of mouse mammary epithelial cells. 103:2683.
— *See* Jalkanen, Nguyen, Rapraeger, Kurn, and Bernfield.
— *See* Jalkanen, Rapraeger, and Bernfield.
— *See* Jalkanen, Rapraeger, Saunders, and Bernfield.
— *See* Rasmussen and Rapraeger.
Rapuano, M. *See* Ross, Rapuano, and Prives.
Rask, L. *See* Ronne, Ocklind, Wiman, Rask, Öbrink, and Peterson.
Rasmussen, J. *See* Lodish, Kong, Hirani, and Rasmussen.
Rasmussen, S., and Rapraeger, A. Altered structure of the hybrid cell surface proteoglycan of mammary epithelial cells in response to transforming growth factor-β. 107:1959.
Rassow, J., Guiard, B., Wienhues, U., Herzog, V., Hartl, F.-U., and Neupert, W. Translocation arrest by reversible folding of a precursor protein imported into mitochondria. A means to quantitate translocation contact sites. 109:1421.
— *See* Pfaller, Steger, Rassow, Pfanner, and Neupert.
Ratajczak, R. *See* Haehnel, Ratajczak, and Robenek.
Ratan, R. R., Maxfield, F. R., and Shelanski, M. L. Long-lasting and rapid calcium changes during mitosis. 107:993.
Ratcliffe, A., Fryer, P. R., and Hardingham, T. E. Proteoglycan biosynthesis in chondrocytes: protein A–gold localization of proteoglycan protein core and chondroitin sulfate within Golgi subcompartments. 101:2355.
— *See* Zanetti, Ratcliffe, and Watt.
Rath, V. L. *See* Tajima, Lauffer, Rath, and Walter.
Rathjen, F. G., Wolff, J. M., Frank, R., Bonhoeffer, F., and Rutishauser, U. Membrane glycoproteins involved in neurite fasciculation. 104:343.
— *See* Chang, Rathjen, and Raper.
Ratner, N., Bunge, R. P., and Glaser, L. A neuronal cell surface heparan sulfate proteoglycan is required for dorsal root ganglion neuron stimulation of Schwann cell proliferation. 101:744.
—, **Elbein, A., Bunge, M. B., Porter, S., Bunge, R. P., and Glaser, L.** Specific asparagine-linked oligosaccharides are not required for certain neuron–neuron and neuron–Schwann cell interactions. 103:159.
—, **Glaser, L., and Bunge, R. P.** PC12 cells as a source of the neurite-derived cell surface mitogen which stimulates Schwann cell division. 98:1150.
Rattner, J. B., and Bazett-Jones, D. P. Kinetochore structure: electron spectroscopic imaging of the kinetochore. 108:1209.
—, **Saunders, C., Davie, J. R., and Hamkalo, B. A.** Ultrastructural organization of yeast chromatin. 93:217.
— *See* Woodcock, Frado, and Rattner.
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— *See* Allan, Rau, Harborne, and Gould.
Raugi, G. J., Mumby, S. M., Abbott-Brown, D., and Bornstein, P. Thrombospondin: synthesis and secretion by cells in culture. 95:351.
— *See* Mumby, Raugi, and Bornstein.
Rauh, J. J., and Nelson, D. L. Camodulin is a major component of extruded trichocysts from *Paramecium tetraurelia*. 91:860.
Rauvala, H. Neurite outgrowth of neuroblastoma cells: dependence on adhesion surface–cell surface interactions. 98:1010.
—, **Carter, W. G., and Hakomori, S.-I.** Studies on cell adhesion and recognition. I. Extent and specificity of cell adhesion triggered by carbohydrate-reactive proteins (glycosidases and lectins) and by fibronectin. 88:127.
—, **and Hakomori, S.-I.** Studies on cell adhesion and recognition. III. The occurrence of α-mannosidase at the fibroblast cell surface, and its possible role in cell recognition. 88:149.
—, **Merenmies, J., Pihlaskari, R., Korkolainen, M., Huhtala, M.-L., and Panula, P.** The adhesive and neurite-promoting molecule p30: analysis of the amino-terminal sequence and production of antipeptide antibodies that detect p30 at the surface of neuroblastoma cells and of brain neurons. 107:2293.
— *See* Carter, Rauvala, and Hakomori.
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— *See* Orci, Ravazzola, Amherdt, Madsen, Perrelet, Vassalli, and Anderson.
— *See* Orci, Ravazzola, Amherdt, Yanihara, Yanaihara, Halban, Renold, and Perrelet.
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— *See* Townes-Anderson, MacLeish, and Raviola.
Raviola, G. *See* Raviola, Goodenough, and Raviola.
Ravoet, A. M., Amar-Costesec, A., Godelaine, D., and Beaufay, H. Quantitative assay and subcellular distribution of enzymes acting on dolichyl phosphate in rat liver. 91:679.
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— *See* Hollyfield, Varner, Rayborn, Liou, and Bridges.
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Raymond, E. G. *See* Kane, Stanton, Raymond, Dobson, Knafelc, and Farber.
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Reaven, E., and Azhar, S. Effect of various hepatic membrane fractions on microtubule assembly—with special emphasis on the role of membrane phospholipids. 89:300.
Reaven, E. P., and Reaven, G. M. Evidence that microtubules play a permissive role in hepatocyte very low density lipoprotein secretion. 84:28.
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— *See* Binder, Frankfurter, and Rebhun.
— *See* Keller, Jemiolo, Burgess, and Rebhun.
— *See* Keller and Rebhun.
— *See* Suprenant and Rebhun.
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— *See* Carlson, Rogers, and Rechsteiner.
— *See* McGarry, Hough, Rogers, and Rechsteiner.
— *See* Wu, Kuehl, and Rechsteiner.
— *See* Wu, Rechsteiner, and Kuehl.
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— *See* Wollman, Olive, Bennoun, and Recouvreur.
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— *See* Gehron Robey, Young, Flanders, Roche, Kondaiah, Reddi, Termine, Sporn, and Roberts.
— *See* Gulati, Reddi, and Zalewski.
— *See* Sampath and Reddi.
— *See* Weiss and Reddi.
Reddy, J. K., Rao, M. S., Qureshi, S. A., Reddy, M. K., Scarpelli, D. G., and Lalwani, N. D. Induction and origin of hepatocytes in rat pancreas. 98:2082.
— *See* Becich, Bendayan, and Reddy.
— *See* Rao, Reddy, Reddy, and Scarpelli.
— *See* Reddy, Qureshi, Hollenberg, and Reddy.
Reddy, M. K., Qureshi, S. A., Hollenberg, P. F., and Reddy, J. K. Immunochemical identity of peroxisomal enoyl-CoA hydratase with the peroxisome-proliferation-associated 80,000 mol wt polypeptide in rat liver. 89:406.
— *See* Rao, Reddy, Reddy, and Scarpelli.
— *See* Reddy, Rao, Qureshi, Reddy, Scarpelli, and Lalwani.
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— *See* Banerjee and Redman.
— *See* Pfeffer, Huima, and Redman.
Reed, S. I. *See* Wittenberg, Richardson, and Reed.
Reeder, R. H. Mechanisms of nucleolar dominance in animals and plants. 101:2013.
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— *See* Schachat, Canine, Briggs, and Reedy.
— *See* Taylor, Reedy, Córdova, and Reedy.
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— *See* Couchman, Rees, Green, and Smith.
— *See* Penn, Burdett, Hobson, Magee, and Rees.
— *See* Penn, Hobson, Rees, and Magee.
— *See* Streeter and Rees.
— *See* Woods, Höök, Kjellén, Smith, and Rees.
Rees, D. D. *See* Fay, Fujiwara, Rees, and Fogarty.
Reese, B. A. *See* Cunha, Fujii, Neubauer, Shannon, Sawyer, and Reese.
Reese, T. S. *See* Bridgman, Kachar, and Reese.
— *See* Bridgman and Reese.
— *See* Cheng and Reese.
— *See* Gulley and Reese.
— *See* Heuser and Reese.
— *See* Kachar, Bridgman, and Reese.
— *See* Kachar and Reese.
— *See* Landis and Reese.
— *See* Ornberg and Reese.
— *See* Schnapp and Reese.
— *See* Schroer, Schnapp, Reese, and Sheetz.
Reeves, R. *See* Disney, Johnson, Magnuson, Sylvester, and Reeves.
Reeves, W. H., Kanwar, Y. S., and Farquhar, M. G. Assembly of the glomerular filtration surface. Differentiation of anionic sites in glomerular capillaries of newborn rat kidney. 85:735.
Regauer, S., Franke, W. W., and Virtanen, I. Intermediate filament cytoskeleton of amnion epithelium and cultured amnion epithelial cells: expression of epidermal cytokeratins in cells of a simple epithelium. 100:997.
Reger, L. *See* Charonis, Skubitz, Koliakos, Reger, Dege, Vogel, Wohlhueter, and Furcht.
Reggio, H., Bainton, D., Harms, E., Coudrier, E., and Louvard, D. Antibodies against lysosomal membranes reveal a 100,000-mol-wt protein that cross-reacts with purified [H^+, K^+]ATPase from gastric mucosa. 99:1511.
— *See* Haeuptle, Suard, Bogenmann, Reggio, Racine, and Kraehenbuhl.
— *See* Louvard, Reggio, and Warren.
— *See* Matlin, Reggio, Helenius, and Simons.
— *See* Mercier, Reggio, Devilliers, Bataille, and Mangeat.
Regula, C. S., Pfeiffer, J. R., and Berlin, R. D. Microtubule assembly and dissembly at alkaline pH. 89:45.
— *See* Kravit, Regula, and Berlin.
— *See* Preston, Regula, Sager, Pearson, Daniels, Brown, and Berlin.
Rehfeld, J. F. *See* Madsen, Larsson, Rehfeld, Schwartz, Lernmark, Labrecque, and Steiner.
Reich, E. *See* Dayer, Vassalli, Bobbitt, Hull, Reich, and Krane.
— *See* Granelli-Piperno and Reich.
— *See* Hatzfeld, Miskin, and Reich.
Reichardt, L. F. *See* Bixby, Lilien, and Reichardt.
— *See* Clegg, Helder, Hann, Hall, and Reichardt.
— *See* Hall, Frazer, Hann, and Reichardt.
— *See* Hall, Neugebauer, and Reichardt.
— *See* Lander, Fujii, Gospodarowicz, and Reichardt.
— *See* Lander, Fujii, and Reichardt.
— *See* Matthew, Tsavaler, and Reichardt.
— *See* Neugebauer, Tomaselli, Lilien, and Reichardt.
— *See* Shelton and Reichardt.
— *See* Tomaselli, Damsky, and Reichardt.
— *See* Tomaselli, Reichardt, and Bixby.
Reichel, M. *See* Kayman, Reichel, and Clarke.
Reichlin, M. *See* Wright-Sandor, Reichlin, and Tobin.
Reichmann, E., Ball, R., Groner, B., and Friis, R. R. New mammary epithelial and fibroblastic cell clones in coculture form structures competent to differentiate functionally. 108:1127.
Reid, L. M. *See* Gatmaitan, Jefferson, Ruiz-Opazo, Biempica, Arias, Dudas, Leinwand, and Reid.
— *See* Rojkind, Gatmaitan, Mackensen, Giambrone, Ponce, and Reid.
— *See* Spray, Fujita, Saez, Choi, Watanabe, Hertzberg, Rosenberg, and Reid.
Reid, M. E. *See* Chasis, Reid, Jensen, and Mohandas.
Reidler, J. *See* Taylor, Reidler, Spudich, and Stryer.
— *See* Yamamoto, Pardee, Reidler, Stryer, and Spudich.
Reif-Lehrer, L. *See* Norenberg, Dutt, and Reif-Lehrer.
Reiger, F., Grumet, M., and Edelman, G. M. N-CAM at the vertebrate neuromuscular junction. 101:285.
Reilly, C. F. *See* Fritze, Reilly, and Rosenberg.
Reilly, E. *See* Driscoll, Dean, Reilly, Bergholz, and Chalfie.
Reimer, G. *See* Benavente, Rose, Reimer, Hügle-Dörr, and Scheer.
Reinach, F. C., Masaki, T., and Fischman, D. A. Characterization of the C-proteins from posterior latissimus dorsi muscle of the adult chicken: heterogeneity within single sarcomeres. 96:297.
—, **Masaki, T., Shafiq, S., Obinata, T., and Fischman, D. A.** Isoforms of C-protein in adult chicken skeletal muscle: detection with monoclonal antibodies. 95:78.
— *See* Dennis, Shimizu, Reinach, and Fischman.
Reinders, J. H. *See* de Groot, Reinders, and Sixma.
Reiner, A. *See* Hinek, Reiner, and Poole.
— *See* Poole, Pidoux, Reiner, Choi, and Rosenberg.
— *See* Poole, Pidoux, Reiner, Cöster, and Hassell.
— *See* Poole, Pidoux, Reiner, and Rosenberg.
Reiness, C. G. *See* Weinberg, Reiness, and Hall.
Reinhardt, B. *See* Cohen, Reinhardt, Castellani, Norton, and Stirewalt.
Reisfeld, R. A. *See* Cheresh, Pytela, Pierschbacher, Klier, Ruoslahti, and Reisfeld.
Reisine, T., Rougon, G., and Barbet, J. Liposome delivery of cyclic AMP-dependent protein kinase inhibitor into intact cells: specific blockade of cyclic AMP-mediated adrenocorticotropin release from mouse anterior pituitary tumor cells. 102:1630.
Reist, N. E., Magill, C., and McMahan, U. J. Agrin-like molecules at synaptic sites in normal, denervated, and damaged skeletal muscles. 105:2457.
Rekvig, O. P. *See* Earnshaw, Rekvig, and Hannestad.
Remillard, S. P., and Witman, G. B. Synthesis, transport, and utilization of specific flagellar proteins during flagellar regeneration in *Chlamydomonas*. 93:615.
— *See* Lai, Remillard, and Fulton.
Renaud, F. L. *See* Rodriguez and Renaud.
Renaud, M. *See* Binder, Tourmente, Roth, Renaud, and Gehring.
Rener, J. *See* Howard, Uni, Aikawa, Aley, Leech, Lew, Wellems, Rener, and Taylor.
Renieri, T. *See* Baccetti, Burrini, Pallini, and Renieri.
Rennard, S. I. *See* Bitterman, Rennard, Adelberg, and Crystal.
Renoir, J.-M. *See* Gasc, Renoir, Radanyiu, Jaob, Tuohimaa, and Baulieu.
Renold, A. E. *See* Orci, Ravazzola, Amherdt, Yanaihara, Yanaihara, Halban, Renold, and Perrelet.
Rentier, B. *See* Baron-Van Evercooren, Kleinman, Seppä, Rentier, and Dubois-Dalcq.
Rentrop, M., Knapp, B., Winter, H., and Schweizer, J. Differential lo-

calization of distinct keratin mRNA-species in mouse tongue epithelium by in situ hybridization with specific cDNA probes. 103:2583.
Repasky, E. A., Symer, D. E., and Bankert, R. B. Spectrin immunofluorescence distinguishes a population of naturally capped lymphocytes in situ. 99:350.
— *See* Black, Koury, Bankert, and Repasky.
— *See* Granger, Repasky, and Lazarides.
Resch, L. *See* Bergeron, Resch, Rachubinski, Patel, and Posner.
Resendez, E., Jr., Ting, J., Kim, K. S., Wooden, S. K., and Lee, A. S. Calcium ionophore A23187 as a regulator of gene expression in mammalian cells. 103:2145.
Resh, M. D., and Erikson, R. L. Highly specific antibody to Rous sarcoma virus src gene product recognizes a novel population of $pp60^{v\text{-}src}$ and $pp60^{c\text{-}src}$ molecules. 100:409.
Resing, K. A., Walsh, K. A., and Dale, B. A. Correction. 100:981.
—, **Walsh, K. A., and Dale, B. A.** Identification of two intermediates during processing of profilaggrin to filaggrin in neonatal mouse epidermis. 99:1372.
Ressler, A. *See* Ciment, Ressler, Letourneau, and Weston.
Ressler, A. H. *See* Letourneau and Ressler.
Reuben, A. *See* Meier, Sztul, Reuben, and Boyer.
Revel, J. P. *See* Meyer, Yancey, Revel, and Peskoff.
Revel, J.-P. *See* Dermietzel, Yancey, Traub, Willecke, and Revel.
— *See* Yancey, John, Lal, Austin, and Revel.
— *See* Yancey, Koh, Chung, and Revel.
Rew, P. *See* Aebi, Fowler, Rew, and Sun.
Reynolds, C. C. *See* Fox, Boyles, Reynolds, and Phillips.
Reynolds, G. *See* Taylor, Blinks, and Reynolds.
Reynolds, G. T. *See* Eisen, Kiehart, Wieland, and Reynolds.
— *See* Eisen and Reynolds.
— *See* Tanasugarn, McNeil, Reynolds, and Taylor.
Reynolds, J. A. *See* Zampighi, Reynolds, and Watt.
Rheinwald, J. G., Jorgensen, J. L., Hahn, W. C., Terpstra, A. J., O'Connell, T. M., and Plummer, K. K. Mesosecrin: a secreted glycoprotein produced in abundance by human mesothelial, endothelial, and kidney epithelial cells in culture. 104:263.
Rhodes, C. J., and Halban, P. A. Newly synthesized proinsulin/insulin and stored insulin are released from pancreatic B cells predominantly via a regulated, rather than a constitutive, pathway. 105:145.
Rice, R. H. *See* Phillips and Rice.
Rich, A. *See* Wittig, Dorbic, and Rich.
Richards, J. E. *See* Bulinski, Richards, and Piperno.
Richardson, C. B. *See* Schmidt, Richardson, Gillham, and Boynton.
Richardson, J. *See* Ebert, Freeze, Richardson, Dimond, and Cardelli.
Richardson, J. M., Woychik, N. A., Ebert, D. L., Dimond, R. L., and Cardelli, J. A. Inhibition of early but not late proteolytic processing event leads to the missorting and oversecretion of precursor forms of lysosomal enzymes in *Dictyostelium discoideum*. 107:2097.
Richardson, J. P. *See* Roditi, Schwarz, Pearson, Beecroft, Liu, Richardson, Bühring, Pleiss, Bülow, Williams, and Overath.
Richardson, S. L. *See* Wittenberg, Richardson, and Reed.
Richardson, W. D. *See* Dingwall, Robbins, Dilworth, Roberts, and Richardson.
— *See* Hart, Richardson, Bolsover, and Raff.
Riches, D. W. H., and Henson, P. M. Bacterial lipopolysaccharide suppresses the production of catalytically active lysosomal acid hydrolases in human macrophages. 102:1606.
Richman, D. P. Lymphocyte cell-cycle analysis by flow cytometry. Evidence for a specific postmitotic phase before return to G_0. 85:459.
Richman, R., Chicoine, L. G., Collini, M. P., Cook, R. G., and Allis, C. D. Micronuclei and the cytoplasm of growing *Tetrahymena* contain a histone acetylase activity which is highly specific for free histone H4. 106:1017.
— *See* Allis, Allen, Wiggins, Chicoine, and Richman.
— *See* Chicoine, Richman, Cook, Gorovsky, and Allis.
— *See* Roth, Schulman, Richman, Cook, and Allis.
— *See* Schulman, Cook, Richman, and Allis.
Richter, H. *See* Albini, Allavena, Melchiori, Giancotti, Richter, Comoglio, Parodi, Martin, and Tarone.
— *See* Schmidt, Robenek, Harrach, Glössl, Nolte, Hörmann, Richter, and Kresse.
Richter, J. *See* Hurkman, Smith, Richter, and Larkins.
Richter-Landsberg, C., and Jastorff, B. The role of cAMP in nerve growth factor–promoted neurite outgrowth in PC12 cells. 102:821.
Ridley, A. J., Davis, J. B., Stroobant, P., and Land, H. Transforming growth factor β1 and β2 are mitogens for rat Schwann cells. 109:3419.
Rieder, C. L., Davison, E. A., Jensen, L. C. W., Cassimeris, L., and Salmon, E. D. Oscillatory movements of monooriented chromosomes and their position relative to the spindle pole result from the ejection properties of the aster and half-spindle. 103:581.
—, **and Nowogrodzki, R.** Intranuclear membranes and the formation of the first meiotic spindle in *Xenos peckii* (*Acroshismus wheeleri*) oocytes. 97:1144.
— *See* Sluder, Miller, and Rieder.
— *See* Sluder and Rieder.
— *See* Wadsworth, Shelden, Rupp, and Rieder.
Riederer, B. M., Zagon, I. S., and Goodman, S. R. Brain spectrin(240/235) and brain spectrin (240/235E): two distinct spectrin subtypes with different locations within mammalian neural cells. 102:2088.
Rieger, F., Daniloff, J. K., Pinçon-Raymond, M., Crossin, K. L., Grumet, M., and Edelman, G. M. Neuronal cell adhesion molecules and cytoactin are colocalized at the node of Ranvier. 103:379.
—, **Nicolet, M., Pinçon-Raymond, M., Murawsky, M., Levi, G., and Edelman, G. M.** Distribution and role in regeneration of N-CAM in the basal laminae of muscle and Schwann cells. 107:707.
— *See* Daniloff, Crossin, Pinçon-Raymond, Murawsky, Rieger, and Edelman.
— *See* Daniloff, Levi, Grumet, Rieger, and Edelman.
— *See* Nicolet, Pinçon-Raymond, and Reiger.
Rieser, G. D. *See* Landreth and Rieser.
— *See* Landreth, Williams, and Rieser.
Rifas, L., Uitto, J., Memoli, V. A., Kuettner, K. E., Henry, R. W., and Peck, W. A. Selective emergence of differential chondrocytes during serum-free culture of cells derived from fetal rat calvaria. 92:493.
Rifkin, D. B., and Moscatelli, D. Recent developments in the cell biology of basic fibroblast growth factor. 109:1.
— *See* Gross, Moscatelli, Jaffe, and Rifkin.
— *See* Mignatti, Tsuboi, Robbins, and Rifkin.
— *See* Saksela, Moscatelli, and Rifkin.
— *See* Saksela, Moscatelli, Sommer, and Rifkin.
— *See* Sato and Rifkin.
Rifkin, J. M., and Olson, G. E. Characterization of maturation-dependent, extrinsic proteins of the rat sperm surface. 100:1582.
Rigal, A. *See* Gorvel, Mishal, Liegey, Rigal, and Maroux.
Rikmenspoel, R. *See* Lindemann, Fentie, and Rikmenspoel.
— *See* Nichols, Jacklet, and Rikmenspoel.
Riley, M. C. *See* Lemmon, Riley, Thomas, Hoover, Maciag, and Bradshaw.
Rimm, D. L., and Pollard, T. D. Purification and characterization of an *Acanthamoeba* nuclear actin-binding protein. 109:585.
—, **Sinard, J. H., and Pollard, T. D.** Location of the head–tail junction of myosin. 108:1783.
Rimmer, C. S. *See* Knox, Crooks, and Rimmer.
Rindler, M. J., Ivanov, I. E., Plesken, H., Rodriguez-Boulan, E., and Sabatini, D. D. Viral glycoproteins destined for apical or basolateral plasma membrane domains traverse the same Golgi apparatus during their intracellular transport in doubly infected Madin-Darby canine kidney cells. 98:1304.
—, **Ivanov, I. E., Plesken, H., and Sabatini, D. D.** Polarized delivery of viral glycoproteins to the apical and basolateral plasma membranes of Madin-Darby canine kidney cells infected with temperature-sensitive viruses. 100:136.
—, **Ivanov, I. E., and Sabatini, D. D.** Microtubule-acting drugs lead to the nonpolarized delivery of the influenza hemagglutinin to the cell surface of polarized Madin–Darby canine kidney cells. 104:231.
—, **and Traber, M. G.** A specific sorting signal is not required for the polarized secretion of newly synthesized proteins from cultured intestinal epithelial cells. 107:471.
— *See* Gottlieb, Gonzalez, Rizzolo, Rindler, Adesnik, and Sabatini.
Rine, J. *See* Wright, Basson, D'Ari, and Rine.
Rinehart, J. E. *See* Oakley and Rinehart.
Ring, D., Hubble, R., and Kirschner, M. Mitosis in a cell with multiple centrioles. 94:549.
Ringertz, N. R. *See* Linder, Zuckerman, and Ringertz.
— *See* Nyman, Hallman, Hadlaczky, Pettersson, Sharp, and Ringertz.
— *See* Scheer, Lanfranchi, Rose, Franke, and Ringertz.
Ringold, G. M. *See* Chapman, Knight, and Ringold.
— *See* Navre and Ringold.
— *See* Torti, Torti, Larrick, and Ringold.
Rink, T. J., Tsien, R. Y., and Pozzan, T. Cytoplasmic pH and free Mg^{2+} in lymphocytes. 95:189.
— *See* Conrad and Rink.
— *See* Pozzan, Arslan, Tsien, and Rink.
— *See* Tsien, Pozzan, and Rink.
Rinke, J. *See* Steitz, Berg, Hendrick, La Branche-Chabot, Metspalu, Rinke, and Yario.
Rinnerthaler, G., Geiger, B., and Small, J. V. Contact formation during fibroblast locomotion: involvement of membrane ruffles and microtubules. 106:747.

Rios-Candelore, M. *See* Schreiber, Kenney, Kowalski, Thomas, Gimenez-Gallego, Rios-Candelore, Di Salvo, Barritault, Courty, Courtois, Moenner, Loret, Burgess, Mehlman, Friesel, Johnson, and Maciag.
Ripellino, J. A., Bailo, M., Margolis, R. U., and Margolis, R. K. Light and electron microscopic studies on the localization of hyaluronic acid in developing rat cerebellum. 106:845.
—, Margolis, R. U., and Margolis, R. K. Immunoelectron microscopic localization of hyaluronic acid–binding region and link protein epitopes in brain. 108:1899.
Ris, H. The cytoplasmic filament system in critical point–dried whole mounts and plastic-embedded sections. 100:1474.
— *See* Euteneuer, Ris, and Borisy.
— *See* Keryer, Ris, and Borisy.
— *See* Sepsenwol, Ris, and Roberts.
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— *See* Zerwes and Risau.
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Rits, S. *See* Volloch, Schweitzer, and Rits.
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Rivera, R. T., Pasion, S. G., Wong, D. T. W., Fei, Y., and Biswas, D. K. Loss of tumorigenic potential by human lung tumor cells in the presence of antisense RNA specific to the ectopically synthesized alpha subunit of human chorionic gonadotropin. 108:2423.
Rivin, C. J., and Fangman, W. L. Cell cycle phase expansion in nitrogen-limited cultures of *Saccharomyces cerevisiae*. 85:96.
—, and Fangman, W. L. Replication fork rate and origin activation during the S phase of *Saccharomyces cerevisiae*. 85:108.
Rizzolo, L. *See* Finidori, Rizzolo, Gonzalez, Kreibich, Adesnik, and Sabatini.
— *See* Gottlieb, Gonzalez, Rizzolo, Rindler, Adesnik, and Sabatini.
Rizzolo, L. J., Finidori, J., Gonzalez, A., Arpin, M., Ivanov, I. E., Adesnik, M., and Sabatini, D. D. Biosynthesis and intracellular sorting of growth hormone–viral envelope glycoprotein hybrids. 101:1351.
Ro, H. S. *See* Spiegelman, Distel, Ro, Rosen, and Satterberg.
Robbins, A. R., Oliver, C., Bateman, J. L., Krag, S. S., Galloway, C. J., and Mellman, I. A single mutation of Chinese hamster ovary cells impairs both Golgi and endosomal functions. 99:1296.
—, Peng, S. S., and Marshall, J. L. Mutant Chinese hamster ovary cells pleiotropically defective in receptor-mediated endocytosis. 96:1064.
— *See* Klausner, van Renswoude, Kempf, Rao, Bateman, and Robbins.
— *See* Roff, Fuchs, Mellman, and Robbins.
Robbins, E. *See* Mignatti, Tsuboi, Robbins, and Rifkin.
Robbins, E. S. *See* Griepp, Dolan, Robbins, and Sabatini.
Robbins, J. *See* Dingwall, Robbins, Dilworth, Roberts, and Richardson.
Robbins, K. C. *See* Notario, Gutkind, Imaizumi, Katamine, and Robbins.
Robenek, H. *See* Haehnel, Ratajczak, and Robenek.
— *See* Schmidt, Robenek, Harrach, Glössl, Nolte, Hörmann, Richter, and Kresse.
Roberson, M. M., and Barondes, S. H. *Xenopus laevis* lectin is localized at several sites in *Xenopus* oocytes, eggs, and embryos. 97:1875.
— *See* Bols, Roberson, Haywood-Reid, Cerra, and Barondes.
Robert-Nicoud, M. *See* Arndt-Jovin, Robert-Nicoud, Baurschmidt, and Jovin.
Roberts, A. B. *See* Carrington, Roberts, Flanders, Roche, and Reddi.
— *See* Flanders, Thompson, Cissel, Van Obberghen-Schilling, Baker, Kass, Ellingsworth, Roberts, and Sporn.
— *See* Gehron Robey, Young, Flanders, Roche, Kondaiah, Reddi, Termine, Sporn, and Roberts.
— *See* Heine, Munoz, Flanders, Ellingsworth, Lam, Thompson, Roberts, and Sporn.
— *See* Sporn, Roberts, Wakefield, and de Crombrugghe.
— *See* Thompson, Flanders, Smith, Ellingsworth, Roberts, and Sporn.
Roberts, B. *See* Dingwall, Robbins, Dilworth, Roberts, and Richardson.
Roberts, C. J., Pohlig, G., Rothman, J. H., and Stevens, T. H. Structure, biosynthesis, and localization of dipeptidyl aminopeptidase B, an integral membrane glycoprotein of the yeast vacuole. 108:1363.
Roberts, C. S. *See* von Grafenstein, Roberts, and Baker.
Roberts, D. D., Sherwood, J. A., and Ginsburg, V. Platelet thrombospondin mediates attachment and spreading of human melanoma cells. 104:131.
— *See* Taraboletti, Roberts, and Liotta.
Roberts, D. M., Zielinski, R. E., Schleicher, M., and Watterson, D. M. Analysis of suborganellar fractions from spinach and pea chloroplasts for calmodulin-binding proteins. 97:1644.
Roberts, K. *See* Pennell, Knox, Scofield, Selvendran, and Roberts.
Roberts, M. P. *See* Miskimins, McClelland, Roberts, and Ruddle.
Roberts, P. J., Cross, A. R., Jones, O. T. G., and Segal, A. W. Development of cytochrome b_{-245} and an active oxidase system in association with maturation of a human promyelocytic (HL-60) cell line. 95:720.
Roberts, R. *See* Ueno, Perryman, Roberts, and Schneider.
Roberts, T. M., Pavalko, F. M., and Ward, S. Membrane and cytoplasmic proteins are transported in the same organelle complex during nematode spermatogenesis. 102:1787.
—, and Ward, S. Centripetal flow of pseudopodial surface components could propel the amoeboid movement of *Caenorhabditis elegans* spermatozoa. 92:132.
—, and Ward, S. Membrane flow during nematode spermiogenesis. 92:113.
— *See* Nelson, Roberts, and Ward.
— *See* Sepsenwol, Ris, and Roberts.
— *See* Ward, Roberts, Strome, Pavalko, and Hogan.
Robertson, J. D., and Vergara, J. Analysis of the structure of intramembrane particles of the mammalian urinary bladder. 86:514.
— *See* Zampighi, Corless, and Robertson.
— *See* Zampighi, Simon, Robertson, McIntosh, and Costello.
Robey, P. G. *See* Whitson, Harrison, Dunlap, Bowers, Fisher, Robey, and Termine.
Robine, S. *See* Dudouet, Robine, Huet, Sahuquillo-Merino, Blair, Coudrier, and Louvard.
Robinson, J., Viti, M., and Höök, M. Structure and properties of an undersulfated heparan sulfate proteoglycan synthesized by a rat hepatoma cell line. 98:946.
Robinson, J. M., Badwey, J. A., Karnovsky, M. L., and Karnovsky, M. J. Cell surface dynamics of neutrophils stimulated with phorbol esters or retinoids. 105:417.
—, Badwey, J. A., Karnovsky, M. L., and Karnovsky, M. J. Release of superoxide and change in morphology by neutrophils in response to phorbol esters: antagonism by inhibitors of calcium-binding proteins. 101:1052.
—, and Karnovsky, M. J. Specializations in filopodial membranes at points of attachment to the substrate. 87:562.
—, Karnovsky, M. L., and Karnovsky, M. J. Glycogen accumulation in polymorphonuclear leukocytes, and other intracellular alterations that occur during inflammation. 95:933.
—, Okada, T., Castellot, J. J., Jr., and Karnovsky, M. J. Unusual lysosomes in aortic smooth muscle cells: presence in living and rapidly frozen cells. 102:1615.
— *See* Apgar, Herrmann, Robinson, and Mescher.
— *See* Hoover, Dawidowicz, Robinson, and Karnovsky.
— *See* Roos, Robinson, and Davidson.
Robinson, J. S. *See* Banta, Robinson, Klionsky, and Emr.
Robinson, K. R. The responses of cells to electrical fields: a review. 101:2023.
— *See* Brawley and Robinson.
— *See* Kline, Robinson, and Nuccitelli.
— *See* Stump and Robinson.
Robinson, M. S. 100-kD coated vesicle proteins: molecular heterogeneity and intracellular distribution studied with monoclonal antibodies. 104:887.
— Cloning of cDNAs encoding two related 100-kD coated vesicle proteins (α-adaptins). 108:833.
—, and Pearse, B. M. F. Immunofluorescent localization of 100K coated vesicle proteins. 102:48.
Robson, R. M. *See* Yamaguchi, Robson, and Stromer.
Roch, J.-M. *See* Matthieu, Roch, Omlin, Rambaldi, Almazan, and Braun.
Rochaix, J.-D. *See* Malnoë, Mayfield, and Rochaix.
Roche, D. L. J. *See* Tucker, Matthews, Hendry, Mackie, and Roche.
Roche, N. S. *See* Carrington, Roberts, Flanders, Roche, and Reddi.
— *See* Gehron Robey, Young, Flanders, Roche, Kondaiah, Reddi, Termine, Sporn, and Roberts.
Rochefort, H. *See* Capony, Morisset, Barrett, Capony, Broquet, Vignon, Chambon, Louisot, and Rochefort.
Rocher, S. *See* Duband, Rocher, Chen, Yamada, and Thiery.
Rock, E. P. *See* Howard, Lyon, Uni, Saul, Aley, Klotz, Panton, Sherwood, Marsh, Aikawa, and Rock.
Rodan, G. *See* Noda and Rodan.
Rodan, G. A. *See* Noda, Yoon, Rodan, and Koppel.
Rodermel, S. R., and Bogorad, L. Maize plastid photogenes: mapping and photoregulation of transcript levels during light-induced development. 100:463.
Rodewald, R. Distribution of immunoglobulin G receptors in the small intestine of the young rat. 85:18.
— *See* Abrahamson and Rodewald.
Rodgers, L. *See* Hearing, Hunter, Rodgers, Gething, and Sambrook.
Rodionov, V. I. *See* Kuznetsov, Rodionov, Nadezhdina, Murphy, and Gelfand.
Roditi, I., Schwarz, H., Pearson, T. W., Beecroft, R. P., Liu, M. K.,

Richardson, J. P., Bühring, H.-J., Pleiss, J., Bülow, R., Williams, R. O., and Overath, P. Procyclin gene expression and loss of the variant surface glycoprotein during differentiation of *Trypanosoma brucei*. 108:737.

Rodman, J. S., Kerjaschki, D., Merisko, E., and Farquhar, M. G. Presence of an extensive clathrin coat on the apical plasmalemma of the rat kidney proximal tubule cell. 98:1630.

—, Seidman, L., and Farquhar, M. G. The membrane composition of coated pits, microvilli, endosomes, and lysosomes is distinctive in the rat kidney proximal tubule cell. 102:77.

Rodman, T. C., Pruslin, F. H., Hoffman, H. P., and Allfrey, V. G. Turnover of basic chromosomal proteins in fertilized eggs: A cytoimmunochemical study of events in vivo. 90:351.

Rodriguez, N., and Renaud, F. L. On the possible role of serotonin in the regulation of regeneration of cilia. 85:242.

Rodriguez-Boulan, E., Paskiet, K. T., and Sabatini, D. D. Assembly of enveloped viruses in Madin-Darby canine kidney cells: polarized budding from single attached cells and from clusters of cells in suspension. 96:866.

—, Paskiet, K. T., Salas, P. J. I., and Bard, E. Intracellular transport of influenza virus hemagglutinin to the apical surface of Madin-Darby canine kidney cells. 98:308.

— *See* Graeve, Drickamer, and Rodriguez-Boulan.

— *See* Green, Meiss, and Rodriguez-Boulan.

— *See* Kreibich, Ojakian, Rodriguez-Boulan, and Sabatini.

— *See* Lisanti, Caras, Davitz, and Rodriguez-Boulan.

— *See* Lisanti, LeBivic, Sargiacomo, and Rodriguez-Boulan.

— *See* Rindler, Ivanov, Plesken, Rodriguez-Boulan, and Sabatini.

— *See* Roth, Gundersen, Patil, and Rodriguez-Boulan.

— *See* Salas, Misek, Vega-Salas, Gundersen, Cereijido, and Rodriguez-Boulan.

— *See* Salas, Vega-Salas, Hochman, Rodriguez-Boulan, and Edidin.

— *See* Vega-Salas, Salas, Gundersen, and Rodriguez-Boulan.

— *See* Vega-Salas, Salas, and Rodriguez-Boulan.

Roe, J. L., Farach, H. A., Jr., Strittmatter, W. J., and Lennarz, W. J. Evidence for involvement of metalloendoproteases in a step in sea urchin gamete fusion. 107:539.

Roelofsen, B. *See* Christiansson, Kuypers, Roelofsen, Op den Kamp, and van Deenen.

— *See* Kuypers, Roelofsen, Berendsen, Op den Kamp, and van Deenen.

Roff, C. F., Fuchs, R., Mellman, I., and Robbins, A. R. Chinese hamster ovary cell mutants with temperature-sensitive defects in endocytosis. I. Loss of function on shifting to the nonpermissive temperature. 103:2283.

Rogalski, A. A. A plasma membrane integral sialoglycoprotein (Sgp130) molecularly distinguishes nonjunctional dense plaque sites of microfilament attachment. 105:819.

—, Bergmann, J. E., and Singer, S. J. Effect of microtubule assembly status on the intracellular processing and surface expression of an integral protein of the plasma membrane. 99:1101.

—, and Bouck, G. B. Characterization and localization of a flagellar-specific membrane glycoprotein in *Euglena*. 86:424.

—, and Bouck, G. B. Flagellar surface antigens in *Euglena*: immunological evidence for an external glycoprotein pool and its transfer to the regenerating flagellum. 93:758.

—, and Singer, S. J. An integral glycoprotein associated with the membrane attachment sites of actin microfilaments. 101:785.

—, and Singer, S. J. Associations of elements of the Golgi apparatus with microtubules. 99:1092.

Rogelj, S., Klagsbrun, M., Atzmon, R., Kurokawa, M., Haimovitz, A., Fuks, Z., and Vlodavsky, I. Basic fibroblast growth factor is an extracellular matrix component required for supporting the proliferation of vascular endothelial cells and the differentiation of PC12 cells. 109:823.

Rogers, C. M. *See* Sweet, Rogers, and Welsh.

Rogers, G. E. *See* Rothnagel and Rogers.

Rogers, J. *See* Hesketh, Beaven, Rogers, Burke, and Warren.

— *See* Nadin, Rogers, Tomlinson, and Edwardson.

Rogers, J. H. Calretinin: a gene for a novel calcium-binding protein expressed principally in neurons. 105:1343.

Rogers, K. A. *See* Jones-Villeneuve, McBurney, Rogers, and Kalnins.

Rogers, O. C. *See* Snider and Rogers.

Rogers, S. *See* Carlson, Rogers, and Rechsteiner.

— *See* McGarry, Hough, Rogers, and Rechsteiner.

Rogers, S. L., Letourneau, P. C., Peterson, B. A., Furcht, L. T., and McCarthy, J. B. Selective interaction of peripheral and central nervous system cells with two distinct cell-binding domains of fibronectin. 105:1435.

Rogowska, J. *See* Bright, Fisher, Rogowska, and Taylor.

Roher, A. E., Palmer, K. C., Chau, V., and Ball, M. J. Isolation and chemical characterization of Alzheimer's disease paired helical filament cytoskeletons: differentiation from amyloid plaque core protein. 107:2705.

Rohrer, H. *See* Saadat, Sendtner, and Rohrer.

Rohrschneider, L. *See* Kabat, Gliniak, Rohrschneider, and Polonoff.

— *See* Shriver and Rohrschneider.

Rojkind, M., Gatmaitan, Z., Mackensen, S., Giambrone, M.-A., Ponce, P., and Reid, L. M. Connective tissue biomatrix: Its isolation and utilization for long-term cultures of normal rat hepatocytes. 87:255.

Role, L. W., and Fischbach, G. D. Changes in the number of chick ciliary ganglion neuron processes with time in cell culture. 104:363.

—, Roufa, D. G., and Fischbach, G. D. The distribution of acetylcholine receptor clusters and sites of transmitter release along chick ciliary ganglion neurite-myotube contacts in culture. 104:371.

Roll, F. J., Madri, J. A., Albert, J., and Furthmayr, H. Codistribution of collagen types IV and AB_2 in basement membranes and mesangium of the kidney. An immunoferritin study of ultrathin frozen sections. 85:597.

— *See* Madri, Roll, Furthmayr, and Foidart.

Rolland, B. *See* Couchie, Fages, Bridoux, Rolland, Tardy, and Nunez.

Romain, R. *See* Olden, Law, Hunter, Romain, and Parent.

Roman, J., LaChance, R. M., Broekelmann, T. J., Kennedy, C. J. R., Wayner, E. A., Carter, W. G., and McDonald, J. A. The fibronectin receptor is organized by extracellular matrix fibronectin: implications for oncogenic transformation and for cell recognition of fibronectin matrices. 108:2529.

Roman, L. M., and Garoff, H. Alteration of the cytoplasmic domain of the membrane-spanning glycoprotein p62 of Semliki Forest virus does not affect its polar distribution in established lines of Madin–Darby canine kidney cells. 103:2607.

—, and Hubbard, A. L. A domain-specific marker for the hepatocyte plasma membrane: localization of leucine aminopeptidase to the bile canalicular domain. 96:1548.

—, and Hubbard, A. L. A domain-specific marker for the hepatocyte plasma membrane. II. Ultrastructural localization of leucine aminopeptidase to the bile canalicular domain of isolated rat liver plasma membranes. 98:1488.

—, and Hubbard, A. L. A domain-specific marker for the hepatocyte plasma membrane. III. Isolation of bile canalicular membrane by immunoadsorption. 98:1497.

Romanov, Y. A. *See* Shirinsky, Antonov, Birukov, Sobolevsky, Romanov, Kabaeva, Antonova, and Smirnov.

Rome, L. H. *See* Cardwell and Rome.

— *See* Kedersha, Hill, Kronquist, and Rome.

— *See* Kedersha and Rome.

— *See* Lemansky, Hasilik, von Figura, Helmy, Fishman, Fine, Kedersha, and Rome.

— *See* Mehrabian, Bame, and Rome.

Romeo, D. *See* Mottola and Romeo.

Rønne, E. *See* Stephens, Pöllänen, Tapiovaara, Leung, Sim, Salonen, Rønne, Behrendt, Danø, and Veheri.

Ronne, H., Ocklind, C., Wiman, K., Rask, L, Öbrink, B., and Peterson, P. A. Ligand-dependent regulation of intracellular protein transport: effect of vitamin A on the secretion of the retinol-binding protein. 96:907.

Rönnstrand, L. *See* Terracio, Rönnstrand, Tingström, Rubin, Claesson-Welsh, Funa, and Heldin.

Roodman, G. D. *See* Ibbotson, Roodman, McManus, and Mundy.

Roof, D. J., and Heuser, J. E. Surfaces of rod photoreceptor disk membranes: integral membrane components. 95:487.

—, Korenbrot, J. I., and Heuser, J. E. Surfaces of rod photoreceptor disk membranes: light-activated enzymes. 95:501.

Roop, D. R. *See* Fisher, Jones, and Roop.

— *See* Yuspa, Kilkenny, Steinert, and Roop.

Roos, D., Voetman, A. A., and Meerhof, L. J. Functional activity of enucleated human polymorphonuclear leukocytes. 97:368.

Roos, D. S., and Choppin, P. W. Biochemical studies on cell fusion. I. Lipid composition of fusion-resistant cells. 101:1578.

—, and Choppin, P. W. Biochemical studies on cell fusion. II. Control of fusion response by lipid alterations. 101:1591.

—, Robinson, J. M., and Davidson, R. L. Cell fusion and intramembrane particle distribution in polyethylene glycol-resistant cells. 97:909.

Roos, E., and Roossien, F. F. Involvement of leukocyte function–associated antigen-1 (LFA-1) in the invasion of hepatocyte cultures by lymphoma and T-cell hybridoma cells. 105:553.

—, Spiele, H., Feltkamp, C. A., Huisman, H., Wiegant, F. A. C., Traas, J., and Mesland, D. A. M. Localization of cell surface glycoproteins in membrane domains associated with the underlying filament network.

101:1817.
— *See* Roossien, de Rijk, Bikker, and Roos.
Roossien, F. F., de Rijk, D., Bikker, A., and Roos, E. Involvement of LFA-1 in lymphoma invasion and metastasis demonstrated with LFA-1–deficient mutants. 108:1979.
— *See* Roos and Roossien.
Ropraz, P. *See* Clowes, Clowes, Kocher, Ropraz, Chaponnier, and Gabbiani.
— *See* Skalli, Ropraz, Trzeciak, Benzonana, Gillessen, and Gabbiani.
Rosa, P., Fumagalli, G., Zanini, A., and Huttner, W. B. The major tyrosine-sulfated protein of the bovine anterior pituitary is a secretory protein present in gonadotrophs, thyrotrophs, mammotrophs, and corticotrophs. 100:928.
—, **Hille, A., Lee, R. W. H., Zanini, A., De Camilli, P., and Huttner, W. B.** Secretogranins I and II: two tyrosine-sulfated secretory proteins common to a variety of cells secreting peptides by the regulated pathway. 101:1999.
—, **Weiss, U., Pepperkok, R., Ansorge, W., Niehrs, C., Stelzer, E. H. K., and Huttner, W. B.** An antibody against secretogranin I (chromogranin B) is packaged into secretory granules. 109:17.
— *See* Giannattasio, Zanini, Rosa, Meldolesi, Margolis, and Margolis.
Rose, B. *See* Keane, Mehta, Rose, Honig, Loewenstein, and Rutishauser.
Rose, J. K. *See* Doms, Ruusala, Machamer, Helenius, Helenius, and Rose.
— *See* Florkiewicz, Smith, Bergmann, and Rose.
— *See* Machamer and Rose.
— *See* Puddington, Machamer, and Rose.
— *See* Scullion, Hou, Puddington, Rose, and Jacobson.
— *See* Zagouras and Rose.
Rose, K. M. *See* Benavente, Rose, Reimer, Hügle-Dörr, and Scheer.
— *See* Scheer, Hügle, Hazan, and Rose.
— *See* Scheer, Lanfranchi, Rose, Franke, and Ringertz.
Rosellini, C. *See* Borsi, Carnemolla, Castellani, Rosellini, Vecchio, Allemanni, Chang, Taylor-Papadimitriou, Pande, and Zardi.
— *See* Castellani, Siri, Rosellini, Infusini, Borsi, and Zardi.
Roseman, S. *See* Sieber and Roseman.
Rosen, B. *See* Spiegelman, Distel, Ro, Rosen, and Satterberg.
Rosen, D. *See* Geiger, Rosen, and Berke.
Rosen, D. M. *See* Seyedin, Thompson, Rosen, and Piez.
Rosen, J. M. *See* Gupta, Rosen, D'Eustachio, and Ruddle.
Rosen, O. M. *See* Nagata, Rosen, Makman, and Bloom.
— *See* Novikoff, Novikoff, Rosen, and Rubin.
Rosen, S. D. *See* Drake and Rosen.
— *See* Geoffroy and Rosen.
— *See* Glabe, Grabel, Vacquier, and Rosen.
— *See* Grabel, Singer, Martin, and Rosen.
— *See* Stoolman and Rosen.
— *See* Stoolman, Tenforde, and Rosen.
— *See* Yednock, Butcher, Stoolman, and Rosen.
— *See* Yednock, Stoolman, and Rosen.
Rosenbaum, J. L. *See* Baker, Schloss, and Rosenbaum.
— *See* Greer, Maruta, L'Hernault, and Rosenbaum.
— *See* Jarvik and Rosenbaum.
— *See* Keller, Schloss, Sillflow, and Rosenbaum.
— *See* L'Hernault and Rosenbaum.
— *See* McKeithan and Rosenbaum.
— *See* McKeithan, Lefebvre, Sillflow, and Rosenbaum.
— *See* Maruta, Greer, and Rosenbaum.
— *See* Mitchell and Rosenbaum.
— *See* Williams, Mitchell, and Rosenbaum.
— *See* Williams, Velleca, Curry, and Rosenbaum.
Rosenberg, A. *See* Hall, O'Leary, and Rosenberg.
Rosenberg, L. *See* Poole, Pidoux, Reiner, and Rosenberg.
— *See* Poole, Pidoux, and Rosenberg.
Rosenberg, L. C. *See* Lewandowska, Choi, Rosenberg, Zardi, and Culp.
— *See* Poole, Pidoux, Reiner, Choi, and Rosenberg.
— *See* Spray, Fujita, Saez, Choi, Watanabe, Hertzberg, Rosenberg, and Reid.
Rosenberg, L. E. *See* Horwich, Fenton, Firgaira, Fox, Kolansky, Mellman, and Rosenberg.
— *See* Horwich, Kalousek, Fenton, Furtak, Pollock, and Rosenberg.
— *See* Sztul, Hendrick, Kraus, Wall, Kalousek, and Rosenberg.
Rosenberg, R. *See* Castellot, Addonizio, Rosenberg, and Karnovsky.
Rosenberg, R. D. *See* Fritze, Reilly, and Rosenberg.
— *See* Galli, Dvorak, Marcum, Ishizaka, Nabel, Der Simonian, Pyne, Goldin, Rosenberg, Cantor, and Dvorak.
— *See* Horwich, Fenton, Firgaira, Fox, Kolansky, Mellman, and Rosenberg.
Rosenberg, S., and Stracher, A. Effect of actin-binding protein on the sedimentation properties of actin. 94:51.
—, **Stracher, A., and Lucas, R. C.** Isolation and characterization of actin and actin-binding protein from human platelets. 91:201.
Rosenberg, U. B. *See* Eppenberger, Perriard, Rosenberg, and Strehler.
Rosenbusch, J. P. *See* Garavito and Rosenbusch.
— *See* Schindler and Rosenbusch.
Rosenfeld, G. C., Hou, D. C., Dingus, J., Meza, I., and Bryan, J. Isolation and partial characterization of human platelet vinculin. 100:669.
Rosenfeld, M. G., Kreibich, G., Popov, D., Kato, K., and Sabatini, D. D. Biosynthesis of lysosomal hydrolases: their synthesis in bound polysomes and the role of co- and post-translational processing in determining their subcellular distribution. 93:135.
—, **Marcantonio, E. E., Hakimi, J., Ort, V. M., Atkinson, P. H., Sabatini, D., and Kreibich, G.** Biosynthesis and processing of ribophorins in the endoplasmic reticulum. 99:1077.
— *See* Croze, Ivanov, Kreibich, Adesnik, Sabatini, and Rosenfeld.
— *See* Harnik-Ort, Prakash, Marcantonio, Colman, Rosenfeld, Adesnik, Sabatini, and Kreibich.
Rosenzweig, L. J. *See* Kanwar and Rosenzweig.
Rosenzweig, S. A., Madison, L. D., and Jamieson, J. D. Analysis of cholecystokinin-binding proteins using endo-β-*N*-acetylglucosaminidase F. 99:1110.
—, **Miller, L. J., and Jamieson, J. D.** Identification and localization of cholecystokinin-binding sites on rat pancreatic plasma membranes and acinar cells: a biochemical and autoradiographic study. 96:1288.
Rosiere, T. K. *See* Dubreuil, Rosiere, Rosner, and Bouck.
Rosner, M. C. *See* Dubreuil, Rosiere, Rosner, and Bouck.
Rosner, M. R. *See* Garcia, Gehm, and Rosner.
— *See* Garcia, Stoppelli, Decker, and Rosner.
— *See* Garcia, Stoppelli, Thompson, Decker, and Rosner.
Rosoff, P. M., and Terres, G. Cyclosporine A inhibits Ca^{2+}-dependent stimulation of the Na^+/H^+ antiport in human T cells. 103:457.
Ross, A., Rapuano, M., and Prives, J. Induction of phosphorylation and cell surface redistribution of acetylcholine receptors by phorbol ester and carbamylcholine in cultured chick muscle cells. 107:1139.
Ross, A. F. *See* Claudio, Paulson, Green, Ross, Hartman, and Hayden.
Ross, C. D. *See* Johnson, Ross, and Bunge.
— *See* Johnson, Ross, Meyers, Spitznagel, and Bunge.
Ross, P. M. Cellular and adenovirus d1312 DNA metabolism in cycling or mitotic human cultures exposed to supralethal gamma radiation. 109:1993.
Ross, R. *See* Bowen-Pope, DiCorleto, and Ross.
— *See* Chamley-Campbell, Campbell, and Ross.
— *See* Gajdusek, Carbon, Ross, Nawroth, and Stern.
— *See* Gajdusek, Dicorleto, Ross, and Schwartz.
— *See* Hanai, Kato, Matsuhashi, Morita, Raines, and Ross.
— *See* Schmidt, Glomset, Wight, Habenicht, and Ross.
— *See* Vogel, Ross, and Raines.
Ross, R. R. *See* Harlan, Thompson, Ross, and Bowen-Pope.
Ross, T. S. *See* Brandley, Ross, and Schnaar.
Rossi, J. M., and Lindquist, S. The intracellular location of yeast heat-shock protein 26 varies with metabolism. 108:425.
Rossier, B. C. *See* Geering, Kraehenbuhl, and Rossier.
— *See* Verrey, Schaerer, Zoerkler, Paccolat, Geering, Kraehenbuhl, and Rossier.
Rossignol, B. *See* Busson-Mabillot, Chambaut-Guérin, Ovtracht, Muller, and Rossignol.
Rossignol, M. *See* Beisson, Cohen, Lefort-Tran, Pouphile, and Rossignol.
— *See* Lefort-Tran, Aufderheide, Pouphile, Rossignol, and Beisson.
Rossomando, E. F., Jahngen, E. G., Varnum, B., and Soll, D. R. Inhibition of nutrient-dependent pinocytosis in *Dictyostelium discoideum* by the amino acid analogue hadacidin. 91:227.
Roth, J. Cytochemical localization of terminal *N*-acetyl-D-galactosamine residues in cellular compartments of intestinal goblet cells: implications for the topology of O-glycosylation. 98:399.
—, **and Berger, E. G.** Immunocytochemical localization of galactosyltransferase in HeLa cells: codistribution with thiamine pyrophosphatase in *trans*-Golgi cisternae. 93:223.
—, **Brown, D., and Orci, L.** Regional distribution of *N*-acetyl-D-galactosamine residues in the glycocalyx of glomerular podocytes. 96:1189.
—, **Lentze, M. J., and Berger, E. G.** Immunocytochemical demonstration of ecto-galactosyltransferase in absorptive intestinal cells. 100:118.
— *See* Binder, Tourmente, Roth, Renaud, and Gehring.
— *See* Lucocq, Brada, and Roth.
— *See* Thorens, Roth, Norman, Perrelet, and Orci.
Roth, M., Lin, M., and Prescott, D. M. Large scale synchronous mating and the study of macronuclear development in *Euplotes crassus*. 101:79.
— *See* Wischik, Crowther, Stewart, and Roth.
Roth, M. B., and Gall, J. G. Monoclonal antibodies that recognize transcription unit proteins on newt lampbrush chromosomes. 105:1047.
Roth, M. G., Doyle, C., Sambrook, J., and Gething M.-J. Heterologous transmembrane and cytoplasmic domains direct functional chimeric influenza virus hemagglutinins into the endocytic pathway. 102:1271.

—, **Gundersen, D., Patil, N., and Rodriguez-Boulan, E.** The large external domain is sufficient for the correct sorting of secreted or chimeric influenza virus hemagglutinins in polarized monkey kidney cells. 104:769.
— *See* Doyle, Roth, Sambrook, and Gething.
— *See* Skibbens, Roth, and Matlin.
Roth, S. Y., Schulman, I. G., Richman, R., Cook, R. G., and Allis, C. D. Characterization of phosphorylation sites in histone H1 in the amitotic macronucleus of *Tetrahymena* during different physiological states. 107:2473.
Roth, T. F. *See* Kelly, Passaniti, Woods, Daiss, and Roth.
Rothblatt, J. *See* Sadler, Chiang, Kurihara, Rothblatt, Way, and Silver.
Rothblatt, J. A., Deshaies, R. J., Sander, S. L., Daum, G., and Schekman, R. Multiple genes are required for proper insertion of secretory proteins into the endoplasmic reticulum in yeast. 109:2641.
Rothfield, N. *See* Earnshaw, Halligan, Cooke, and Rothfield.
Rothfield, N. F. *See* Earnshaw, Sullivan, Machlin, Cooke, Kaiser, Pollard, Rothfield, and Cleveland.
Rothfield, N. L. *See* Sager, Rothfield, Oliver, and Berlin.
Rothman, F. G. *See* Marin and Rothman.
Rothman, J. E., Bursztyn-Pettegrew, H., and Fine, R. E. Transport of the membrane glycoprotein of vesicular stomatitis virus to the cell surface in two stages by clathrin-coated vesicles. 86:162.
—, **and Fries, E.** Transport of newly synthesized vesicular stomatitis viral glycoprotein to purified Golgi membranes. 89:162.
—, **Miller, R. L., and Urbani, L. J.** Intercompartmental transport in the Golgi complex is a dissociative process: facile transfer of membrane protein between two Golgi populations. 99:260.
—, **Urbani, L. J., and Brands, R.** Transport of protein between cytoplasmic membranes of fused cells: correspondence to processes reconstituted in a cell-free system. 99:248.
— *See* Braell, Schlossman, Schmid, and Rothman.
— *See* Brands, Snider, Hino, Park, Gelboin, and Rothman.
— *See* Dunphy and Rothman.
— *See* Fries and Rothman.
— *See* Patzer, Schlossman, and Rothman.
— *See* Rubenstein, Fine, Luskey, and Rothman.
— *See* Schlossman, Schmid, Braell, and Rothman.
— *See* Weidman, Melançon, Block, and Rothman.
Rothman, J. H., Yamashiro, C. T., Raymond, C. K., Kane, P. M., and Stevens, T. H. Acidification of the lysosome-like vacuole and the vacuolar H^+-ATPase are deficient in two yeast mutants that fail to sort vacuolar proteins. 109:93.
— *See* Roberts, Pohlig, Rothman, and Stevens.
— *See* Stevens, Rothman, Payne, and Schekman.
Rothnagel, J. A., and Rogers, G. E. Trichohyalin, an intermediate filament–associated protein of the hair follicle. 102:1419.
Rothstein, A. *See* Grinstein, Cohen, Goetz, and Rothstein.
Rothwell, S. W., Grasser, W. A., Baker, H. N., and Murphy, D. B. The relative contributions of polymer annealing and subunit exchange to microtubule dynamics in vitro. 105:863.
—, **Grasser, W. A., and Murphy, D. B.** Direct observation of microtubule treadmilling by electron microscopy. 101:1637.
—, **Grasser, W. A., and Murphy, D. B.** End-to-end annealing of microtubules in vitro. 102:619.
—, **Nath, J., and Wright, D. G.** Interactions of cytoplasmic granules with microtubules in human neutrophils. 108:2313.
Rotrosen, D., and Gallin, J. I. Histamine type I receptor occupancy increases endothelial cytosolic calcium, reduces F-actin, and promotes albumin diffusion across cultured endothelial monolayers. 103:2379.
— *See* Joiner, Ganz, Albert, and Rotrosen.
Rotwein, P. *See* Bortz, Rotwein, DeVol, Bechtel, Hansen, and Hammerman.
— *See* Hennessy, Frazier, Kim, Deckwerth, Baumgartel, Rotwein, and Frazier.
Roufa, D. G. *See* Role, Roufa, and Fischbach.
Rougon, G., Dubois, C., Buckley, N., Magnani, J. L., and Zollinger, W. A monoclonal antibody against meningococcus group B poly-saccharides distinguishes embryonic from adult N-CAM. 103:2429.
— *See* Gennarini, Cibelli, Rougon, Mattei, and Goridis.
— *See* Reisine, Rougon, and Barbet.
Rouleau, M. F. *See* Warshawsky, Goltzman, Rouleau, and Bergeron.
Rouse, B. T. N. *See* Streeter, Rouse, and Butcher.
Rousselet, A. *See* Cartaud, Sobel, Rousselet, Devaux, and Changeux.
— *See* Dunia, Manenti, Rousselet, and Benedetti.
Rousset, B. *See* Bernier-Valentin, Aunis, and Rousset.
Rousset, M. *See* Trugnan, Rousset, Chantret, Barbat, and Zweibaum.
Roux, E. *See* Kapoor, Sakai, Funk, Roux, Bornstein, and Sage.
Rovasio, R. A., Delouvée, A., Yamada, K. M., Timpl, R., and Thiery, J. P. Neural crest cell migration: requirements for exogenous fibronectin and high cell density. 96:462.
Rovera, G. *See* Migliaccio, Migliaccio, Kreider, Rovera, and Adamson.
Rovis, L. *See* Grab, Ito, Kara, and Rovis.
Rowett, L. H. *See* Doherty, Barton, Dickson, Seaton, Rowett, Moore, Gower, and Walsh.
— *See* Pizzey, Rowett, Barton, Dickson, and Walsh.
Roy, H., Bloom, M., Milos, P., and Monroe, M. Studies on the assembly of large subunits of ribulose bisphosphate carboxylase in isolated pea chloroplasts. 94:20.
— *See* Cannon, Wang, and Roy.
Royal, A. *See* Laliberté, Dagenais, Filion, Bibor-Hardy, Simard, and Royal.
— *See* Lebel, Lampron, Royal, and Raymond.
Rozdzial, M. M., and Haimo, L. T. Reactivated melanophore motility: differential regulation and nucleotide requirements of bidirectional pigment granule transport. 103:2755.
Rozengurt, E. *See* Burns and Rozengurt.
— *See* Mendoza, Schneider, Lopez-Rivas, Sinnett-Smith, and Rozengurt.
— *See* Wang and Rozengurt.
— *See* Zachary, Sinnett-Smith, and Rozengurt.
Ruben, G. C. *See* Yurchenco and Ruben.
Rubenstein, J. L. R., and Chappell, T. G. Construction of a synthetic messenger RNA encoding a membrane protein. 96:1464.
—, **Fine, R. E., Luskey, B. D., and Rothman, J. E.** Purification of coated vesicles by agarose gel electrophoresis. 89:357.
Rubenstein, P., Ruppert, T., and Sandra, A. Selective isoactin release from cultured embryonic skeletal muscle cells. 92:164.
Rubenstein, P. A. *See* Wang and Rubenstein.
Rubin, C. S. *See* Novikoff, Novikoff, Rosen, and Rubin.
Rubin, K. *See* Terracio, Rönnstrand, Tingström, Rubin, Claesson-Welsh, Funa, and Heldin.
Rubin, L. L. *See* Anthony, Jacobs-Cohen, Marazzi, and Rubin.
— *See* Englander and Rubin.
— *See* Godfrey, Nitkin, Wallace, Rubin, and McMahan.
— *See* Marazzi, Bard, Klymkowsky, and Rubin.
Rubin, R. W., Lyubkin, A. K., and Pressman, B. C. Comparison of the protein content of three different bovine secretory granule membrane types: a search for exocytosis-specific shared proteins. 99:356.
— *See* Quillen, Castello, Krishan, and Rubin.
— *See* Suchard, Lattanzio, Rubin, and Pressman.
Rubino, S., Fighetti, M., Unger, E., and Cappuccinelli, P. Location of actin, myosin, and microtubular structures during directed locomotion of *Dictyostelium* amebae. 98:382.
Rubinstein, N. A., and Kelly, A. M. Development of muscle fiber specialization in the rat hindlimb. 90:128.
— *See* Narusawa, Fitzsimons, Izumo, Nadal-Ginard, Rubinstein, and Kelly.
Ruby, J. R. *See* Githens, Holmquist, Whelan, and Ruby.
Ruddle, F. *See* Krauter, Leinwand, D'Eustachio, Ruddle, and Darnell.
Ruddle, F. H. *See* Gupta, Rosen, D'Eustachio, and Ruddle.
— *See* Huttner, Barbosa, Scangos, Pratcheva, and Ruddle.
— *See* Miskimins, McClelland, Roberts, and Ruddle.
Ruderman, J. V. *See* Luca and Ruderman.
— *See* Standart, Bray, George, Hunt, and Ruderman.
— *See* Standart, Hunt, and Ruderman.
— *See* Westendorf, Swenson, and Ruderman.
Rudland, P. S. *See* Warburton, Ormerod, Monaghan, Ferns, and Rudland.
Rudzinska, M. A. Internalization of macromolecules from the medium in Suctoria. 84:172.
Ruegg, M. A., Stoeckli, E. T., Lanz, R. B., Streit, P., and Sonderegger, P. A homologue of the axonally secreted protein axonin-1 is an integral membrane protein of nerve fiber tracts involved in neurite fasciculation. 109:2363.
Ruf, W. *See* Drake, Ruf, Morrissey, and Edgington.
Ruff, V. A. *See* Leach, Powers, Ruff, Jaken, and Kaufman.
Ruggeri, Z. M. *See* Dejana, Lampugnani, Giorgi, Gaboli, Federici, Ruggeri, and Marchisio.
Ruggiero, R. M. *See* Liscum, Ruggiero, and Faust.
Ruiz, F., Garreau de Loubresse, N., and Beisson, J. A mutation affecting basal body duplication and cell shape in *Paramecium*. 104:417.
—, **Garreau de Loubresse, N., and Beisson, J.** Correction. 104:1755.
Ruiz-Opazo, N. *See* Gatmaitan, Jefferson, Ruiz-Opazo, Biempica, Arias, Dudas, Leinwand, and Reid.
— *See* Herrera, Emanuel, Ruiz-Opazo, Levenson, and Nadal-Ginard.
Rukenstein, A. *See* Greene, Drexler, Connolly, Rukenstein, and Green.
— *See* Seeley, Rukenstein, Connolly, and Greene.
— *See* Volonté, Rukenstein, Loeb, and Greene.
Runge, M. S. *See* Tseng, Runge, Cooper, Williams, and Pollard.
Rungger-Brändle, E., Achtstätter, T., and Franke, W. W. An epithelium-type cytoskeleton in a glial cell: astrocytes of amphibian optic nerves contain cytokeratin filaments and are connected by desmosomes. 109:705.
— *See* Hoessli, Rungger-Brändle, Jockusch, and Gabbiani.

Runyan, R. B., Maxwell, G. D., and Shur, B. D. Evidence for a novel enzymatic mechanism of neural crest cell migration on extracellular glycoconjugate matrices. 102:432.
—, Versalovic, J., and Shur, B. D. Functionally distinct laminin receptors mediate cell adhesion and spreading: the requirement for surface galactosyltransferase in cell spreading. 107:1863.
Ruohola, H., Kabcenell, A. K., and Ferro-Novick, S. Reconstruction of protein transport from the endoplasmic reticulum to the Golgi complex in yeast: the acceptor Golgi compartment is defective in the *sec23* mutant. 107:1465.
— *See* Bacon, Salminen, Ruohola, Novick, and Ferro-Novick.
Ruoslahti, E. *See* Argraves, Suzuki, Arai, Thompson, Pierschbacher, and Ruoslahti.
— *See* Bourdon and Ruoslahti.
— *See* Cheresh, Pytela, Pierschbacher, Klier, Ruoslahti, and Reisfeld.
— *See* Dedhar, Argraves, Suzuki, Ruoslahti, and Pierschbacher.
— *See* Dedhar, Ruoslahti, and Pierschbacher.
— *See* Engvall, Davis, Dickerson, Ruoslahti, Varon, and Manthorpe.
— *See* Gehlsen, Argraves, Pierschbacher, and Ruoslahti.
— *See* Hayman, Engvall, A'Hearn, Barnes, Pierschbacher, and Ruoslahti.
— *See* Hayman, Engvall, and Ruoslahti.
— *See* Hayman, Oldberg, Martin, and Ruoslahti.
— *See* Hayman, Pierschbacher, and Ruoslahti.
— *See* Ill, Engvall, and Ruoslahti.
— *See* Languino, Gehlsen, Wayner, Carter, Engvall, and Ruoslahti.
— *See* Manthorpe, Engvall, Ruoslahti, Longo, Davis, and Varon.
— *See* Singer, Scott, Kawka, Kazazis, Gailit, and Ruoslahti.
Rupp, G. *See* Wadsworth, Shelden, Rupp, and Rieder.
Ruppert, T. *See* Rubenstein, Ruppert, and Sandra.
Russ, G. *See* Doms, Russ, and Yewdell.
Russell, D. G. *See* Schneider, Sherwin, Sasse, Russell, Gull, and Seebeck.
Russell, S. D. *See* Merlie, Isenberg, Russell, and Sanes.
Russell, T. R. *See* Azarnia and Russell.
Russo, R. G., Liotta, L. A., Thorgeirsson, U., Brundage, R., and Schiffmann, E. Polymorphonuclear leukocyte migration through human amnion membrane. 91:459.
Rutishauser, U., and Edelman, G. M. Effects of fasiculation on the outgrowth of neurites from spinal ganglia in culture. 87:370.
—, Grumet, M., and Edelman, G. M. Neural cell adhesion molecule mediates initial interactions between spinal cord neurons and muscle cells in culture. 97:145.
—, Watanabe, M., Silver, J., Troy, F. A., and Vimr, E. R. Specific alteration of NCAM-mediated adhesion by an endo-neuraminidase. 101:1842.
— *See* Acheson and Rutishauser.
— *See* Frelinger and Rutishauser.
— *See* Hall and Rutishauser.
— *See* Keane, Mehta, Rose, Honig, Loewenstein, and Rutishauser.
— *See* Rathjen, Wolff, Frank, Bonhoeffer, and Rutishauser.
— *See* van den Pol, diPorzio, and Rutishauser.
— *See* Watanabe, Frelinger, and Rutishauser.
Rutkowski, J. L. *See* Tennekoon, Yoshino, Peden, Bigbee, Rutkowski, Kishimoto, DeVries, and McKhann.
Rutter, W. J. *See* Garcia, Ou, Rutter, and Walter.
— *See* Van Nest, MacDonald, Raman, and Rutter.
Ruusala, A. *See* Doms, Ruusala, Machamer, Helenius, Helenius, and Rose.
Ruusala, A.-I. *See* Mattsson, Enberg, Ruusala, Hall, and Påhlman.
Ruysschaert, J.-M. *See* Lambotte, Falmagne, Capiau, Zamen, Ruysschaert, and Dirkx.
Ruzicka, D. L., and Schwartz, R. J. Sequential activation of α-actin genes during avian cardiogenesis: vascular smooth muscle α-actin gene transcripts mark the onset of cardiomyocyte differentiation. 107:2575.
Ryckewaert, J.-J. *See* Duperray, Berthier, Chagnon, Ryckewaert, Ginsberg, Plow, and Marguerie.
— *See* Tranqui, Andrieux, Hudry-Clergeon, Ryckewaert, Soyez, Chapel, Ginsberg, Plow, and Marguerie.
Rydel, R. E. *See* Green, Rydel, Connolly, and Greene.
Ryo, R., Nakeff, A., Huang, S. S., Ginsberg, M., and Deuel, T. F. New synthesis of a platelet-specific protein: platelet factor 4 synthesis in a megacaryocyte-enriched rabbit bone marrow culture system. 96:515.
Ryrie, I. J. *See* Day, Ryrie, and Fuad.
Ryser, J.-E. *See* Montesano, Mossaz, Ryser, Orci, and Vassalli.

S

Saadat, S., Sendtner, M., and Rohrer, H. Ciliary neutrotrophic factor induces cholinergic differentiation of rat sympathetic neurons in culture. 108:1807.
—, and Thoenen, H. Selective induction of tyrosine hydroxylase by cell–cell contact in bovine adrenal chromaffin cells is mimicked by plasma membranes. 103:1991.
Saari, J. C. *See* Bunt and Saari.
— *See* Bunt-Milam and Saari.
Sabanero, M., Gonzalez-Robles, A., and Meza, I. Characterization of a 36,000-dalton protein from the surface of Madin-Darby canine kidney cells involved in cell attachment and spreading. 100:2001.
— *See* Meza, Ibarra, Sabanero, Martinez-Palomo, and Cereijido.
Sabath, D. E. *See* Lee, Sabath, Deutsch, and Prytowsky.
Sabatini, D. *See* Rosenfeld, Marcantonio, Hakimi, Ort, Atkinson, Sabatini, and Kreibich.
Sabatini, D. D., Kreibich, G., Morimoto, T., and Adesnik, M. Mechanisms, for the incorporation of proteins in membranes and organelles. 92:1.
— *See* Colman, Kreibich, Frey, and Sabatini.
— *See* Croze, Ivanov, Kreibich, Adesnik, Sabatini, and Rosenfeld.
— *See* De Lemos-Chiarandini, Frey, Sabatini, and Kreibich.
— *See* Finidori, Rizzolo, Gonzalez, Kreibich, Adesnik, and Sabatini.
— *See* Gottlieb, Gonzalez, Rizzolo, Rindler, Adesnik, and Sabatini.
— *See* Griepp, Dolan, Robbins, and Sabatini.
— *See* Harnik-Ort, Prakash, Marcantonio, Colman, Rosenfeld, Adesnik, Sabatini, and Kreibich.
— *See* Kreibich, Ojakian, Rodriguez-Boulan, and Sabatini.
— *See* Monier, Van Luc, Kreibich, Sabatini, and Adesnik.
— *See* Rindler, Ivanov, Plesken, Rodriguez-Boulan, and Sabatini.
— *See* Rindler, Ivanov, Plesken, and Sabatini.
— *See* Rindler, Ivanov, and Sabatini.
— *See* Rizzolo, Finidori, Gonzalez, Arpin, Ivanov, Adesnik, and Sebatini.
— *See* Rodriguez-Boulan, Paskiet, and Sabatini.
— *See* Rosenfeld, Kreibich, Popov, Kato, and Sabatini.
— *See* Sabban, Marchesi, Adesnik, and Sabatini.
Sabbadini, R. A. *See* Damiani, Margreth, Furlan, Dahms, Arnn, and Sabbadini.
Sabban, E., Marchesi, V., Adesnik, M., and Sabatini, D. D. Erythrocyte membrane protein band 3: Its biosynthesis and incorporation into membranes. 91:637.
Saber, M. A., Shafritz, D. A., and Zern, M. A. Changes in collagen and albumin mRNA in liver tissue of mice infected with *Schistosoma mansoni* as determined by in situ hydridization. 97:986.
Sachdeva, M. *See* Storrie, Pool, Sachdeva, Maurey, and Oliver.
Sache, E. *See* Castellot, Choay, Lormeau, Petitou, Sache, and Karnovsky.
Sachs, G. *See* Berglindh, Dibona, Pace, and Sachs.
Sacktor, B. *See* Kerjaschki, Noronha-Blob, Sacktor, and Farquhar.
Sacramone, L. M. *See* Howe, Sacramone, Mooseker, and Morrow.
Sadler, I., Chiang, A., Kurihara, T., Rothblatt, J., Way, J., and Silver, P. A yeast gene important for protein assembly into the endoplasmic reticulum and the nucleus has homology to DnaJ, an *Escherichia coli* heat shock protein. 109:2665.
— *See* Silver, Sadler, Osborne.
Sadoul, R. *See* Pollerberg, Sadoul, Goridis, and Schachner.
— *See* Poltorak, Sadoul, Keilhauer, Landa, Fahrig, and Schachner.
Saez, J. C. *See* Spray, Fujita, Saez, Choi, Watanabe, Hertzberg, Rosenberg, and Reid.
Saffitz, J. E. *See* Neufeld, Majerus, Krueger, and Saffitz.
Safranyos, R. G. A., and Caveney, S. Rates of diffusion of fluorescent molecules via cell-to-cell membrane channels in a developing tissue. 100:736.
Saga, S., Nagata, K., Chen, W.-T., and Yamada, K. M. pH-Dependent function, purification, and intracellular location of a major collagen-binding glycoprotein. 105:517.
— *See* Nagata, Saga, and Yamada.
Sagara, J. *See* Nagata, Sagara, and Ichikawa.
Sage, E. H. *See* Kapoor, Sakai, Funk, Roux, Bornstein, and Sage.
Sage, H., Mecham, R., Johnson, C., and Bornstein, P. Fetal calf ligament fibroblasts in culture secrete a low molecular weight collagen with a unique resistance to proteolytic degradation. 97:1931.
—, Vernon, R. B., Funk, S. E., Everitt, E. A., and Angello, J. SPARC, a secreted protein associated with cellular proliferation, inhibits cell spreading in vitro and exhibits Ca^{2+}-dependent binding to the extracellular matrix. 109:341.
Sager, P. R., Rothfield, N. L., Oliver, J. M., and Berlin, R. D. A novel mitotic spindle pole component that originates from the cytoplasm during prophase. 103:1863.
— *See* Preston, Regula, Sager, Pearson, Daniels, Brown, and Berlin.
Sager, R. *See* Harrison, Soudry, and Sager.
— *See* Spudich and Sager.
Saginati, M. *See* Glukhova, Frid, Shekhonin, Vasilevskaya, Grunwald, Saginati, and Koetliansky.
Sahasrabuddhe, C. G. *See* Adlakha, Sahahrabuddhe, Wright, and Rao.

Sahuquillo-Merino, C. *See* Dudouet, Robine, Huet, Sahuquillo-Merino, Blair, Coudrier, and Louvard.
— *See* Huet, Sahuquillo-Merino, Coudrier, and Louvard.
Sahyoun, N. *See* Burgess, Sahyoun, Blanchard, LeVine, Chang, and Cuatrecasas.
Saibil, H., and Hewat, E. Ordered transmembrane and extracellular structures in squid photoreceptor microvilli. 105:19.
— *See* Caretta and Saibil.
Saide, J. D., Chin-Bow, S., Hogan-Sheldon, J., Busquets-Turner, L., Vigoreaux, J. O., Valgeirdottir, K., and Pardue, M. L. Characterization of components of Z-bands in the fibrillar flight muscle of *Drosophila melanogaster*. 109:2157.
Saidel, L. J. *See* Spitzer, Downing, Koch, Salo, and Saidel.
Saier, M. H., Jr. *See* Chuman, Fine, Cohen, and Saier.
Saimi, Y. *See* Haga, Forte, Saimi, and Kung.
— *See* Haga, Saimi, Takahashi, and Kung.
— *See* Ramanathan, Saimi, Peterson, Nelson, and Kung.
St. John, P. A., Froehner, S. C., Goodenough, D. A., and Cohen, J. B. Nicotinic postynaptic membranes from *Torpedo*: sidedness, permeability to macromolecules, and topography of major polypeptides. 92:333.
St. John, P. L. *See* Abrahamson, Irwin, St. John, Perry, Accavitti, Heck, and Couchman.
Saito, A., Inui, M., Radermacher, M., Frank, J., and Fleischer, S. Ultrastructure of the calcium release channel of sarcoplasmic reticulum. 107:211.
—, **Seiler, S., Chu, A., and Fleischer, S.** Preparation and morphology of sacroplasmic reticulum terminal cisternae from rabbit skeletal muscle. 99:875.
— *See* Costello, Chadwick, Saito, Chu, Maurer, and Fleischer.
— *See* Mitchell, Saito, Palade, and Fleischer.
Saito, H. *See* Ito, Tanaka, Yoshida, Onoda, Ohta, Hagiwara, Itoh, Ogura, Saito, and Hidaka.
Saito, K. *See* Koenig, Saito, and Ikeda.
Saito, T. *See* Matsuda, Saito, Yamaguchi, Koseki, and Hayashi.
Saitoh, T., and Schwartz, J. H. Phosphorylation-dependent subcellular translocation of a Ca^{2+}/calmodulin-dependent protein kinase produces an autonomous enzyme in *Aplysia* neurons. 100:835.
Sakai, H. *See* Hamaguchi, Toriyama, Sakai, and Hiramoto.
— *See* Ishiguro, Murofushi, and Sakai.
— *See* Murofushi, Kotani, Aizawa, Hisanga, Hirokawa, and Sakai.
Sakai, L. Y., Keene, D. R., and Engvall, E. Fibrillin, a new 350-kD glycoprotein is a component of extracellular microfibrils. 103:2499.
—, **Keene, D. R., Morris, N. P., and Burgeson, R. E.** Type VII collagen is a major structural component of anchoring fibrils. 103:1577.
— *See* Kapoor, Sakai, Funk, Roux, Bornstein, and Sage.
— *See* Keene, Sakai, Bachinger, and Burgeson.
— *See* Keene, Sakai, Lunstrum, Morris, and Burgeson.
Sakakura, T. *See* Kusakabe, Yokoyama, Sakakura, Nomura, Hosick, and Nishizuka.
Saksela, O., Moscatelli, D., and Rifkin, D. B. The opposing effects of basic fibroblast growth factor and transforming growth factor-beta on the regulation of plasminogen activator activity in capillary endothelial cells. 105:957.
—, **Moscatelli, D., Sommer, A., and Rifkin, D. B.** Endothelial cell-derived heparan sufate binds fibroblast growth factor and protects it from proteolytic degradation. 107:743.
— *See* Laiho, Saksela, Andreasen, and Keski-Oja.
— *See* Pöllänen, Saksela, Salonen, Andreasen, Nielsen, Danø, and Vaheri.
Saku, T. *See* Charonis, Tsilibary, Saku, and Furthmayr.
Sakurai, T. *See* Wataya-Kaneda, Kaneda, Sakurai, Sugawa, and Uchida.
Salas, P. J. I., Misek, D. E., Vega-Salas, D. E., Gundersen, D., Cereijido, M., and Rodriguez-Boulan, E. Microtubules and actin filaments are not critically involved in the biogenesis of epithelial cell surface polarity. 102:1853.
—, **Vega-Salas, D. E., Hochman, J., Rodriquez-Boulan, E., and Edidin, M.** Selective anchoring in the specific plasma membrane domain: a role in epithelial cell polarity. 107:2363.
— *See* Rodriguez-Boulan, Paskiet, Salas, and Bard.
— *See* Vega-Salas, Salas, Gundersen, and Rodriguez-Boulan.
— *See* Vega-Salas, Salas and Rodriguez-Boulan.
Sala-Trepat, J. M. *See* Poliard, Bernuau, Tournier, Legrès, Schoevaert, Feldmann, and Sala-Trepat.
Salditt-Georgieff, M., Harpold, M., Sawicki, S., Nevins, J., and Darnell, J. E., Jr. Addition of poly(A) to nuclear RNA occurs soon after RNA synthesis. 86:844.
— *See* Isom, Georgoff, Salditt-Georgieff, and Darnell.
Sale, W. S. The axonemal axis and Ca^{2+}-induced asymmetry of active microtubule sliding in sea urchin sperm tails. 102:2042.
—, **and Fox, L. A.** The isolated β-heavy chain subunit of dyein translocates microtubules in vitro. 107:1793.
—, **Goodenough, U. W., and Heuser, J. E.** The substructure of isolated and in situ outer dynein arms of sea urchin sperm flagella. 101:1400.
— *See* Fox and Sale.
— *See* Hartzell and Sale.
Salik, J., Herlands, L., Hoffman, H. P., and Poccia, D. Electrophoretic analysis of the stored histone pool in unfertilized sea urchin eggs: Quantification and identification by antibody binding. 90:385.
Saling, P. *See* Leyton and Saling.
Salisbury, J. *See* Wright, Salisbury, and Jarvik.
Salisbury, J. L., Baron, A. T., and Sanders, M. A. The centrin-based cytoskeleton of *Chlamydomonas reinhardtii*: distribution in interphase and mitotic cells. 107:635.
—, **Baron, A., Surek, B., and Melkonian, M.** Striated flagellar roots: isolation and partial characterization of a calcium-modulated contractile organelle. 99:962.
—, **Condeelis, J. S., and Satir, P.** Role of coated vesicles, microfilaments, and calmodulin in receptor-mediated endocytosis by cultured B lymphoblastoid cells. 87:132.
—, **Sanders, M. A., and Harpst, L.** Flagellar root contraction and nuclear movement during flagellar regeneration in *Chlamydomonas reinhardtii*. 105:1799.
— *See* Baron and Salisbury.
— *See* McFadden, Schulze, Surek, Salisbury, and Melkonian.
— *See* Sanders and Salisbury.
Salmi, T. *See* Hirvonen, Sandberg, Kalimo, Hukkanen, Vuorio, Salmi, and Alitalo.
Salminen, A., and Novick, P. J. The Sec15 protein responds to the function of the GTP-binding protein, Sec4, to control vesicular traffic in yeast. 109:1023.
— *See* Bacon, Salminen, Ruohola, Novick, and Ferro-Novick.
Salmon, E. D., and Begg, D. A. Functional implications of cold-stable microtubules in kinetochore fibers of insect spermatocytes during anaphase. 85:853.
—, **Leslie, R. J., Saxton, W. M. Karow, M. L., and McIntosh, J. R.** Spindle microtubule dynamics in sea urchin embryos: analysis using a fluorescein-labeled tubulin and measurements of fluorescence redistribution after laser photobleaching. 99:2165.
—, **McKeel, M., and Hays, T.** Rapid rate of tubulin dissociation from microtubules in the mitotic spindle in vivo measured by blocking polymerization with colchicine. 99:1067.
—, **Saxton, W. M., Leslie, R. J., Karow, M. L, and McIntosh, J. R.** Diffusion coefficient of fluorescein-labeled tubulin in the cytoplasm of embryonic cells of a sea urchin: video image analysis of fluorescein redistribution after photobleaching. 99:2157.
—, **and Segall, R. R.** Calcium-labile mitotic spindles isolated from sea urchin eggs (*Lytechinus variegatus*). 86:355.
— *See* Begg, Salmon, and Hyatt.
— *See* Cassimeris, Pryer, and Salmon.
— *See* Cassimeris, Wadsworth, and Salmon.
— *See* Hays, Wise, and Salmon.
— *See* Leslie, Saxton, Mitchison, Neighbors, Salmon, and McIntosh.
— *See* Pratt, Otter, and Salmon.
— *See* Rieder, Davison, Jensen, Cassimeris, and Salmon.
— *See* Saxton, Stemple, Leslie, Salmon, Zavortink, and McIntosh.
— *See* Wadsworth and Salmon.
— *See* Walker, Inoué, and Salmon.
— *See* Walker, O'Brien, Pryer, Soboeiro, Voter, Erickson, and Salmon.
Salmond, B. *See* Kuehl, Salmond, and Tran.
Salo, W. L. *See* Downing, Spitzer, Koch, and Salo.
— *See* Spitzer, Downing, Koch, Salo, and Saidel.
Salomon, D. *See* Bendori, Salomon, and Geiger.
Salomonsky, N. L. *See* Bloodgood, Woodward, and Salomonsky.
— *See* Brown and Salomonsky.
Salonen, E.-M. *See* Pöllänen, Saksela, Salonen, Andreasen, Nielsen, Danø, and Vaheri.
— *See* Stephens, Pöllänen, Tapiovaara, Leung, Sim, Salonen, Rønne, Behrendt, Danø, and Vaheri.
Salpeter, M. M., Cooper, D. L., and Levitt-Gilmour, T. Degradation rates of acetylcholine receptors can be modified inthe postjunctional plasma membrane of the vertebrate neuromuscular junction. 103:1399.
—, **and Farquhar, M. G.** High resolution analysis of the secretory pathway in mammotrophs of the rat anterior pituitary. 91:240.
—, **and Harris, R.** Distribution and turnover rate of acetylcholine receptors throughout the junction folds at a vertebrate neuromuscular junction. 96:1781.
—, **Marchaterre, M., and Harris, R.** Distribution of extrajunctional acetylcholine receptors on a vertebrate muscle: evaluated by using a scanning electron microscope autoradiographic procedure. 106:2087.

—, **Spanton, S., Holley, K., and Podleski, T. R.** Brain extract causes acetylcholine receptor redistribution which mimics some early events at developing neuromuscular junctions. 93:417.
— *See* Horovitz, Knaack, Podleski, and Salpeter.
— *See* Horovitz, Spitsberg, and Salpeter.
— *See* Knaack, Shen, Salpeter, and Podleski.
— *See* Shyng and Salpeter.
Salvén, P. *See* Wasenius, Saraste, Salvén, Erämaa, Holm, and Lehto.
Salvo, H. *See* Millonig, Salvo, and Aebi.
Salzer, J. L., and Bunge, R. P. Studies of Schwann cell proliferation. I. An analysis in tissue culture of proliferation during development, Wallerian degeneration, and direct injury. 84:739.
—, **Bunge, R. P., and Glaser, L.** Studies of Schwann cell proliferation. III. Evidence for the surface localization of the neurite mitogen. 84:767.
—, **Holmes, W. P., and Colman, D. R.** The amino acid sequences of the myelin-associated glycoproteins: homology to the immunoglobin gene superfamily. 104:957.
—, **Williams, A. K., Glaser, L., and Bunge, R. P.** Studies of Schwann cell proliferation. II. Characterization of the stimulation and specificity of the response to a neurite membrane fraction. 84:753.
Salzman, N. H., and Maxfield, F. R. Fusion-accessibility of endocytic compartments along the recycling and lysosomal endocytic pathways in intact cells. 109:2097.
—, **and Maxfield, F. R.** Intracellular fusion of sequentially formed endocytic compartments. 106:1083.
Sambrook, J. *See* Bird, Gething, and Sambrook.
— *See* Doxsey, Sambrook, Helenius, and White.
— *See* Doyle, Roth, Sambrook and Gething.
— *See* Doyle, Sambrook, and Gething.
— *See* Gallagher, Henneberry, Wilson, Sambrook and Gething.
— *See* Hearing, Gething, and Sambrook.
— *See* Hearing, Hunter, Rodgers, Gething, and Sambrook.
— *See* Roth, Doyle, Sambrook, and Gething.
Sammack, P. J., Gorbsky, G. J., and Borisy, G. G. Microtubule dynamics in vivo: a test of mechanisms of turnover. 104:395.
— *See* Gorbsky, Sammak, and Borisy.
— *See* Lim, Sammak, and Borisy.
Sampath, T. K., and Reddi, A. H. Importance of geometry of the extracellular matrix in endochondrial bone differentiation. 98:2192.
Sampedro, M. N., Bussineau, C. M., and Cotman, C. W. Postsynaptic density antigens: Preparation and characterization of an antiserum against postsynaptic densities. 90:675.
Samrey, U. *See* Broughton, Wong, Lewin, Samrey, Myint, Meyer, Dowling, and Simon.
Samuelson, J. C., and Caulfield, J. P. Loss of covalently labeled glycoproteins and glycolipids from the surface of newly transformed schistosomula of *Schistosoma mansoni*. 94:363.
—, **and Caulfield, J. P.** The cercarial glycocalyx of *Schistosoma mansoni*. 100:1423.
—, **Caulfield, J. P., and David, J. R.** Schistosomula of *Schistosoma mansoni* clear concanavalin A from their surface by sloughing. 94:355.
— *See* Caulfield, Korman, and Samuelson.
Sam-Yellowe, T. Y., Shio, H., and Perkins, M. E. Secretion of *Plasmodium falciparum* rhoptry protein into the plasma membrane of host erythrocytes. 106:1507.
Sanchez, E. *See* Nathan, Srimal, Farber, Sanchez, Kabbash, Asch, Gailit, and Wright.
Sandberg, M., Tammimen, M., Hirvonen, H., Vuorio, E., and Pihlajaniemi, T. Expression of mRNAs coding for the α1 chain of type XIII collagen inman fetal tissues: comparison with expression of mRNAs for collagen types I, II, and III. 109:1371.
—, **and Vuorio, E.** Localization of types I, II, and III collagen mRNAs in developing human skeletal tissues by in situ hybridization. 104:1077.
— *See* Hirvonen, Sandberg, Kalimo, Hukkanen, Vuorio, Salmi, and Alitalo.
— *See* Mali, Sandberg, Vuorio, Yelick, Hecht, and Parvinen.
Sander, S. L. *See* Rothblatt, Deshaies, Sander, Daum, and Schekman.
Sanders, M. A., and Salisbury, J. L. Centrin-mediated microtubule severing during flagellar excision in *Chlamydomonas reinhardtii*. 108:1751.
— *See* Salisbury, Baron, and Sanders.
— *See* Salisbury, Sanders, and Harpst.
Sanders, M. M. Identification of histone H2b as a heat-shock protein in *Drosophila*. 91:579.
— *See* Browning and Sanders.
Sanderson, R. D., Fitch, J. M., Linsenmayer, T. F., and Mayne, R. Fibroblasts promote the formation of a continuous basal lamina during myogenesis in vitro. 102:740.
— *See* Fitch, Gibney, Sanderson, Mayne, and Linsenmayer.
— *See* Linsenmayer, Fitch, Schmid, Zak, Gibney, Sanderson, and Mayne.
— *See* Mayne, Wiedemann, Irwin, Sanderson, Fitch, Linsenmayer, and Kühn.
Sandoval, I. V. *See* Bonifacino, Perez, Klausner, and Sandoval.
— *See* Wehland, Willingham, and Sandoval.
— *See* Yuan, Barriocanal, Bonifacino, and Sandoval.
Sandoz, D. *See* Klotz, Bordes, Laine, Sandoz, and Bornens.
Sandra, A. *See* Rubenstein, Ruppert, and Sandra.
Sandvig, K., and Olsnes, S. Diphtheria toxin entry into cells is facilitated by low pH. 87:828.
—, **Olsnes, S., Brown, J. E., Petersen, O. W., and Van Deurs, B.** Endocytosis from coated pits of shiga toxin: a glycolipid-binding protein from *Shigella dysenteriae* 1. 108:1331.
—, **Olsnes, S., Petersen, O. W., and Van Deurs, B.** Acidification of the cytosol inhibits endocytosis from coated pits. 105:679.
—, **Sundan, A., and Olsnes, S.** Evidence that diptheria toxin and modeccin enter the cytosol from different vesicular compartments. 98:963.
— *See* Madshus, Olsnes, and Sandvig.
— *See* Olsnes, Tønnessen, and Sandvig.
— *See* Van Deurs, Sandvig, Petersen, Olsnes, Simons, and Griffiths.
— *See* Van Deurs, Tønnessen, Petersen, Sandvig, and Olsnes.
Sanes, J. R. Laminin, fibronectin, and collagen in synaptic and extrasynaptic portions of muscle fiber basement membrane. 93:442.
—, **Schachner, M., and Covault, J.** Expression of several adhesive macromolecules (N-CAM, L1, J1, NILE, uvomorulin, laminin, fibronectin, and a heparan sulfate proteoglycan) in embryonic, adult, and denervated adult skeletal muscles. 102:420.
— *See* Covault, Cheney, and Sanes.
— *See* Covault, Merlie, Goridis, and Sanes.
— *See* Covault and Sanes.
— *See* Gatchalian, Schachner, and Sanes.
— *See* Merlie, Isenberg, Russell, and Sanes.
Sänger, A. *See* Schwerzmann, Cruz-Orive, Eggmann, Sänger, and Weibel.
Sanger, J. M., Mittal, B., Pochapin, M. B., and Sanger, J. W. Myofibrillogenesis in living cells microinjected with fluorescently labeled alpha-actinin. 102:2053.
—, **and Sanger, J. W.** Banding and polarity of actin filaments in interphase and cleaving cells. 86:568.
— *See* Mittal, Sanger, and Sanger.
— *See* Sanger, Mittal, and Sanger.
— *See* Sanger, Sanger, and Jockusch.
Sanger, J. W., Mittal, B., and Sanger, J. M. Analysis of myofibrillar structure and assembly using fluorescently labeled contractile proteins. 98:825.
—, **Mittal, B., and Sanger, J. M.** Interaction of fluorescently labeled contractile proteins with the cytoskeleton in cell models. 99:918.
—, **Sanger, J. M., and Jockusch, B. M.** Differences in the stress fibers between fibroblasts and epithelial cells. 96:961.
— *See* Mittal, Sanger, and Sanger.
— *See* Nothnagel, Barak, Sanger, and Webb.
— *See* Nothnagel, Sanger, and Webb.
— *See* Sanger, Mittal, Pochapin, and Sanger.
— *See* Sanger and Sanger.
San Huang, J. *See* Senior, Griffin, San Huang, Walz, and Deuel.
Santell, L. *See* Levin and Santell.
Santoni, M.-J. *See* Nguyen, Mattei, Mattei, Santoni, Goridis, and Jordan.
— *See* Small, Shull, Santoni, and Akeson.
Santoro, F. *See* Simionescu, Simionescu, Santoro, and Palade.
Santoro, S. A. *See* Galvin, Dixit, O'Rourke, Santoro, Grant, and Frazier.
— *See* Staatz, Rajpara, Wayner, Carter, and Santoro.
Santos-Sacchi, J., and Gordon, M. Induction of the acrosome reaction in guinea pig spermatozoa by cGMP analogues. 85:798.
Sanz, P., and Meyer, D. I. Secretion in yeast: preprotein binding to a membrane receptor and ATP-dependent translocation are sequential and separable events in vitro. 108:2101.
Sanzone, C. F. *See* Landis, Sanzone, Brickley-Parsons, and Glimcher.
Sappino, A.-P., Huarte, J., Belin, D., Vassalli, J.-D. Plasminogen activators in tissue remodeling and invasion: mRNA localization in mouse ovaries and implanting embryos. 109:2471.
— *See* Huarte, Belin, Bosco, Sappino, and Vassalli.
Saraste, J., Palade, G. E., and Farquhar, M. G. Antibodies to rat pancreas Golgi subfractions: identification of a 58-kD *cis*-Golgi protein. 105:2021.
— *See* Kaariainen, Hashimoto, Saraste, Virtanen, and Penttinen.
Saraste, M. *See* Wasenius, Saraste, Salvén, Erämaa, Holm, and Lehto.
Sardet, C. *See* Zimmerberg, Sardet, and Epel.
Sargent, P. B., Hedges, B. E., Tsavaler, L., Clemmons, L, Tzartos, S., and Lindstrom, J. M. Structure and transmembrane nature of the acetylcholine receptor in amphibian skeletal muscle as revealed by cross-reacting monoclonal antibodies. 98:609.
Sargent, T. D. *See* Miyatani, Winkles, Sargent, and Dawid.

Sargiacomo, M. *See* Lisanti, LeBivic, Sargiacomo, and Rodriguez-Boulan.
Sariban-Sohraby, S. *See* Turner, Thompson, Sariban-Sohraby, and Handler.
Sariola, H., Kuusela, P., and Ekblom, P. Cellular origin of fibronectin in interspecies hybrid kidneys. 99:2099.
Sarkar, D. P., Morris, S. J., Eidelman, O., Zimmerberg, J., and Blumenthal, R. Initial stages of influenza hemagglutinin–induced cell fusion monitored simultaneously by two fluorescent events: cytoplasmic continuity and lipid mixing. 109:113.
Särndahl, E., Lindroth, M., Bengtsson, T., Fällman, M. Gustavsson, J. Stendahl, O., and Andersson, T. Association of ligand-receptor complexes with actin filaments in human neutrophils: a possible regulatory role for a G-protein. 109:2791.
Sarris, A. H., and Palade, G. E. Immunofluorescent detection of erythrocyte sialoglycoprotein antigens on murine erythroid cells. 93:591.
—, and Palade, G. E. Isolation and partial characterization of the sialoglycoprotein fraction of murine erythrocyte ghosts. 93:583.
Sartore, S., Gorza, L., Bormioli, S. P., Libera, L. D., and Schiaffino, S. Myosin types and fiber types in cardiac muscle. I. Ventricular myocardium. 88:226.
— *See* Bormioli, Sartore, Vitadello, and Schiaffino.
— *See* Cantini, Sartore, and Schiaffino.
— *See* Gorza, Sartore, and Schiaffino.
— *See* Gorza, Sartore, Thornbell, and Schiaffino.
Sas, D. F., Sas, M. J., Johnson, K. R., Menko, A. S., and Johnson, R. G. Junctions between lens fiber cells are labeled with a monoclonal antibody shown to be specific for MP26. 100:216.
Sas, M. J. *See* Sas, Sas, Johnson, Menko, and Johnson.
Sasaki, H. *See* Kondo, Watanabe, Sasaki, Uehara, and Oishi.
Sasaki-Sherrington, S. E., Jacobs, J. R., and Stevens, J. K. Intracellular control of axial shape in non-uniform neurites: a serial electron microscopic analysis of organelles and microtubules in AI and AII retinal amacrine neurites. 98:1279.
Sasse, J., Horwitz, A., and Holtzer, H. Separation of precursor myogenic and chondrogenic cells in early limb bud mesenchyme by a monoclonal antibody. 99:1856.
— *See* Blood, Sasse, Brodt, and Zetter.
— *See* Braunhut, Gudas, Kurokawa, Sasse, and D'Amore.
Sasse, R., Glyn, M. C. P., Birkett, C. R., and Gull, K. Acetylated α-tubulin in *Physarum*: immunological characterization of the isotype and its usage in particular microtubular organelles. 104:41.
— *See* Schneider, Sherwin, Sasse, Russell, Gull, and Seebeck.
— *See* Sherwin, Schneider, Sasse, Seebeck, and Gull.
Satir, B. H. *See* Garofalo, Gilligan, and Satir.
— *See* Garofalo and Satir.
— *See* Gilligan and Satir.
— *See* Hays, Bourguet, Satir, Franki, and Rapoport.
— *See* Maihle, Dedman, Means, Chafouleas, and Satir.
Satir, P. *See* Lieberman, Wasco, MacLeod, Satir, and Orr.
— *See* Salisbury, Condeelis, and Satir.
Satlin, L. M., and Schwartz, G. J. Cellular remodeling of HCO_3-secreting cells in rabbit renal collecting duct in response to an acidic environment. 109:1279.
Sato, C., Kuriyama, R., and Nishizawa, K. Microtubule-organizing centers abnormal in number, structure, and nucleating activity in x-irradiated mammalian cells. 96:776.
—, Nishizawa, K., Nakayama, T., and Kobayashi, T. Effect upon mitogenic stimulation of calcium-dependent phosphorylation of cytoskeleton-associated 350,000- and 80,000-mol-wt polypeptides in quiescent 3Y1 cells. 100:748.
Sato, F. *See* Poruchynsky, Tyndall, Both, Sato, Bellamy, and Atkinson.
Sato, G. H. *See* Wolfe, Sato, and McClure.
Sato, M., Schwarz, W. H., Selden, S. C., and Pollard, T. D. Mechanical properties of brain tubulin and microtubules. 106:1205.
—, Wong, T. Z., and Allen, R. D. Rheological properties of living cytoplasm: endoplasm of *Physarum* plasmodium. 97:1089.
— *See* Ka[illegible]r, Sato, Ebert, and Pollard.
Sato, S. *See* Tsukita, Tsukita, Ishikawa, Sato, and Nakoa.
Sato, V. L. *See* Howard, Abmayr, Shinefeld, Sato, and Elgin.
Sato, Y., and Rifkin, D. B. Autocrine activities of basic fibroblast growth factor: regulation of endothelial cell movement, plasminogen activator synthesis, and DNA synthesis. 107:1199.
—, and Rifkin, D. B. Inhibition of endothelial cell movement by pericytes and smooth muscle cells: activation of a latent transforming growth factor-β1–like molecule by plasmin during co-culture. 109:309.
Satter, R. L., Garber, R. C., Khairallah, L., and Cheng, Y.-S. Elemental analysis of freeze-dried thin sections of *Samanea* motor organs: barriers to ion diffusion through the apoplast. 95:893.
Satterberg, B. *See* Spiegelman, Distel, Ro, Rosen, and Satterberg.
Sattilaro, R. F., Dentler, W. L., and LeCluyse, E. L. Microtubule-associated proteins (MAPs) and the organization of actin filaments in vitro. 90:467.
Satya-Prakash, K. L. *See* Rao and Satya-Prakash.
Saubermann, A. J., Beeuwkes, R., and Peters, P. D. Application of scanning electron microscopy to x-ray analysis of forzen-hydrated sections. II. Analysis of standard solutions and artificial electrolyte gradients. 88:268.
—, Echlin, P., Peters, P. D., and Beeuwkes, R. Application of scanning electron microscopy to x-ray analysis of forzen-hydrated sections. I. Specimen handling techniques. 88:257.
— *See* Bulger, Beeuwkes, and Saubermann.
Sauder, D. N. *See* Baumann, Hill, Sauder, and Jahreis.
Sauer, H. W. *See* Adlakha, Shipley, Zhao, Jones, Wright, Rao, and Sauer.
Sauk, J. J., Krumweide, M., Cocking-Johnson, D., and White, J. G. Reconstitution of cytokeratin filaments in vitro: further evidence for the role of nonhelical peptides in filament assembly. 99:1590.
Saul, A., Lamont, G., Sawyer, W. H., and Kidson, C. Decreased membrane deformability in melanesian ovalocytes from Papua New Guinea. 98:1348.
Saul, A. J. *See* Howard, Lyon, Uni, Saul, Aley, Klotz, Panton, Sherwood, Marsh, Aikawa, and Rock.
Saumweber, H. *See* Falkner, Saumweber, and Biessmann.
— *See* Gruenbaum, Landesman, Drees, Bare, Saumweber, Paddy, Sedat, Smith, Benton, and Fisher.
— *See* Hochstrasser, Mathog, Gruenbaum, Saumweber, and Sedat.
Saunders, C. *See* Rattner, Saunders, Davie, and Hamkalo.
Saunders, D. *See* Fehlmann, Carpentier, Le Cam, Thamm, Saunders, Brandenburg, Orci, and Freychet.
Saunders, J. C. *See* Tilney, Egelman, DeRosier, and Saunders.
— *See* Tilney and Saunders.
Saunders, S., and Bernfield, M. Cell surface proteoglycan binds mouse mammary epithelial cells to fibronectin and behaves as a receptor for interstitial matrix. 106:423.
—, Jalkanen, M., O'Farrell, S., and Bernfield, M. Molecular cloning of syndecan, an integral membrane proteoglycan. 108:1547.
— *See* Jalkanen, Rapraeger, Saunders, and Bernfield.
Savagner, P., Imhof, B. A., Yamada, K. M., and Thiery, J.-P. Homing of hemopoietic precursor cells to embryonic thymus: characterization of an invasive mechanism induced by chemotactic peptides. 103:2715.
Savion, N. *See* Isaacs, Savion, Gospodarowicz, and Shuman.
— *See* Tseng, Savion, Gospodarowicz, and Stern.
Sawada, H. *See* Maruyama, Sawada, Kimura, Ohashi, Higuchi, and Umazume.
Sawamura, T., *See* Matsuura, Nakada, Sawamura, and Tashiro.
Sawicki, S. *See* Salditt-Georgieff, Harpold, Sawicki, Nevins, and Darnell.
Sawtell, N. M., and Lessard, J. L. Cellular distribution of smooth muscle actin during mammalian embryogenesis: expression of the α-vascular but not the γ-enteric isoform in differentiating striated myocytes. 109:2929.
Sawyer, L. *See* Cunha, Fujii, Neubauer, Shannon, Sawyer, and Reese.
Sawyer, R. H. *See* Knapp, O'Guin, and Sawyer.
Sawyer, W. H. *See* Saul, Lamont, Sawyer, and Kidson.
Saxen, L. *See* Ekblom, Lehtonen, Saxen, and Timpl.
Saxton, W. M., and MacIntosh, J. R. Interzoe microbutule behavior in late anaphase and telophase spindles. 105:875.
—, Stemple, D. L., Leslie, R. J., Salmon, E. D., Zavortink, M., and McIntosh, J. R. Tubulin dynamics in cultured mammalian cells. 99:2175.
— *See* Leslie, Saxton, Mitchison, Neighbors, Salmon, and McIntosh.
— *See* Olmsted, Stemple, Saxton, Neighbors, and McIntosh.
— *See* Salmon, Leslie, Saxton, Karow, and McIntosh.
— *See* Salmon, Saxton, Leslie, Karow, and McIntosh.
Sburlati, A. *See* Cabib, Sburlati, Bowers, and Silverman.
Scallen, T. J. *See* Keller, Scallen, Clarke, Maher, Krisans, and Singer.
Scangos, G. A. *See* Huttner, Barbosa, Scangos, Pratcheva, and Ruddle.
Scanlon, D. B. *See* Burns, Lucas, Krissansen, Werkmeister, Scanlon, Simpson, and Vadas.
Scarpelli, D. G. *See* Rao, Reddy, Reddy, and Scarpelli.
— *See* Reddy, Rao, Qureshi, Reddy, Scarpelli, and Lalwani.
Schaart, G. *See* Pieper, Schaart, Krimpenfort, Henderik, Moshage, van de Kemp, Ramaekers, Berns, and Bloemendal.
Schachat, F. H., Canine, A. C., Briggs, M. M., and Reedy, M. C. The presence of two skeletal muscle α-actinins correlates with troponin-tropomyosin expression and Z-line width. 101:1001.
Schachner, M. *See* Antonicek, Persohn, and Schachner.
— *See* ffrench-Constant, Miller, Kruse, Schachner, and Raff.
— *See* Gatchalian, Schachner and Sanes.
— *See* Kücherer, Faissner, and Schachner.
— *See* Künemund, Jungalwala, Fischer, Chou, Keilhauer, and Schachner.

— *See* Martini and Schachner.
— *See* Persohn and Schachner.
— *See* Pesheva, Spiess, and Schachner.
— *See* Pollerberg, Sadoul, Goridis, and Schachner.
— *See* Poltorak, Sadoul, Keilhauer, Landa, Fahrig, and Schachner.
— *See* Sanes, Schachner, and Covault.
— *See* Schnitzer, Franke, and Schachner.
— *See* Seilheimer, Persohn, and Schachner.
— *See* Seilheimer and Schachner.
— *See* Sommer, Lagenaur, and Schachner.
Schachter, H. *See* Dennis, Carver, and Schachter.
— *See* Lingwood and Schachter.
Schackmann, R. W. *See* Trimmer, Ebina, Schackmann, Meinhof, and Vacquier.
Schaer, J.-C. *See* Zimmermann, Schaer, Muller, Schneider, Miodonski-Maculewicz, and Schindler.
Schaerer, E. *See* Verrey, Schaerer, Zoerkler, Paccolat, Geering, Kraehenbuhl, and Rossier.
Schäfer, B. W., and Perriard, J.-C. Intracellular targeting of isoproteins in muscle cytoarchitecture. 106:1161.
Schafer, D. A., and Stockdale, F. E. Identification of sarcolemma-associated antigens with differential distribution on fast and slow skeletal muscle fibers. 104:967.
Schantz, A. R. Cytosolic free calcium-ion concentration in cleaving embryonic cells of *Oryzias latipes* measured with calcium-sensitive microelectrodes. 100:947.
Schantz, A. W. *See* Eckert, Koons, Schantz, and Zobel.
Scharff, D. J., Delegeane, A. M., and Lee, A. S. Characterization of a cell cycle mutant derived from hamster fibroblasts: reversion analysis. 92:629.
Schatten, G., Schatten, H., Bestor, T. H., and Balczon, R. Taxol inhibits the nuclear movements during fertilization and induces asters in unfertilized sea urchin eggs. 94:455.
— *See* Nash, Kozak, Angerer, Angerer, Schatten, Schatten, and Marzluff.
Schatten, H. *See* Nash, Kozak, Angerer, Angerer, Schatten, Schatten, and Marzluff.
— *See* Schatten, Schatten, Bestor, and Balczon.
Schatz, G. *See* Hwang, Jascur, Vesweber, Pon, and Schatz.
— *See* Pon, Moll, Vestweber, Marshallsay, and Schatz.
— *See* Vestweber and Schatz.
Schauenstein, K. *See* Patzak, Böck, Fischer-Colbrie, Schauenstein, Schmidt, Lingg, and Winkler.
Schauer, I., Emr, S., Gross, C., and Schekman, R. Invertase signal and mature sequence substitutions that delay intercompartmental transport of active enzyme. 100:1664.
— *See* Ferro-Novick, Hansen, Schauer, and Schekman.
Scheckman, R. *See* Holcomb, Hansen, Etcheverry, and Scheckman.
Schedl, T., Burland, T. G., Gull, K., and Dove, W. F. Cell cycle regulation of tubulin RNA level, tubulin protein synthesis, and assembly of microtubules in *Physarum*. 99:155.
— *See* Burland, Gull, Schedl, Boston, and Dove.
Scheele, G., Jacoby, R., and Carne, T. Mechanism of compartmentation of secretory proteins: Transport of exocrine pancreatic proteins across the microsomal membrane. 87:611.
— *See* Schick, Kern, and Scheele.
Scheele, G. A., *See* Bartelt, Carline, Scheele, and Cohen.
Scheer, U. Identification of a novel class of tandemly repeated genes transcribed on lampbrush chromosomes of *Pleurodeles waltlii*. 88:599.
—, **Hügle, B., Hazan, R., and Rose, K. M.** Drug-induced dispersal of transcribed rRNA genes and transcriptional products: immunolocalization and silver staining of different nucleolar components in rat cells treated with dichloro-β-D-ribofuranosylbenzimidazole. 99:672.
—, **Lanfranchi, G., Rose, K. M., Franke, W. W., and Ringertz, N. R.** Migration of rat RNA polymerase I into chick erythrocyte nuclei undergoing reactivation in a chick-rat heterokaryons. 97:1641.
— *See* Benavente, Rose, Reimer, Hügle-Dörr, and Scheer.
— *See* Franke, Kleinschmidt, Spring, Krohne, Grund, Trendelenburg, Stoehr, and Scheer.
— *See* Hügle, Hazan, Scheer, and Franke.
— *See* Kleinschmidt, Scheer, Dabauvalle, Bustin, and Franke.
Scheffer, R. C. T. *See* Geuze, Slot, van der Ley, and Scheffer.
Scheffler, I. E. *See* Breen and Scheffler.
— *See* Burnett and Scheffler.
Schekman, R. *See* Bernstein, Hoffmann, Ammerer, and Schekman.
— *See* Deshaies and Schekman.
— *See* Ferro-Novick, Hansen, Schauer, and Schekman.
— *See* Ferro-Novick, Novick, Field, and Schekman.
— *See* Field and Schekman.
— *See* Nakano, Brada, and Schekman.
— *See* Novick and Schekman.
— *See* Payne, Baker, van Tuinen, and Schekman.
— *See* Rothblatt, Deshaies, Sander, Daum, and Schekman.
— *See* Schauer, Emer, Gross, and Schekman.
— *See* Stevens, Rothman, Payne, and Schekman.
Schekman, R. W. *See* Böhni, Deshaies, and Schekman.
Scheller, R. H. *See* Kreiner, Sossin, and Scheller.
Schenk, R. K. *See* Hunziker, Herrmann, Schenk, Mueller, and Moor.
— *See* Hunziker and Schenk.
— *See* Kuettner, Pauli, Gall, Memoli, and Schenk.
Scher, C. D. *See* Frantz, Nathan, and Scher.
— *See* Singh, Chaikin, Pledger, Scher, and Stiles.
Schermer, A., Galvin, S., and Sun, T.-T. Differentiation-related expression of a major 64K corneal keratin in vivo and in culture suggests limbal location of corneal epithelial stem cells. 103:49.
— *See* Dembitzer, Herz, Schermer, Wolley, and Koss.
Scherrer, K. *See* Grossi de Sa, Martins de Sa, Harper, Olink-Coux, Huesca, and Scherrer.
Scherson, T., Kreis, T. E., Schlessinger, J., Littauer, U. Z., Borisy, G. G., and Geiger, B. Dynamic interactions of fluorescently labeled microtubule-associated proteins in living cells. 99:425.
Schiaffino, S. *See* Bormioli, Sartore, Vitadello, and Schiaffino.
— *See* Cantini, Sartore, and Schiaffino.
— *See* Gorza, Sartore, and Schiaffino.
— *See* Gorza, Sartore, Thornell, and Schiaffino.
— *See* Sartore, Gorza, Bormioli, Liberia, and Schiaffino.
Schibler, M. J., and Cabral, F. Taxol-dependent mutants of Chinese hamster ovary cells with alterations in α- and β-tubulin. 102:1522.
— *See* Huang, Watterson, Lee, and Schibler.
Schick, J., Kern, H., and Scheele, G. Hormonal stimulation in the exocrine pancreas results in coordinate and anticoordinate regulation of protein synthesis. 99:1569.
Schiebler, W. *See* Huttner, Schiebler, Greengard, and De Camilli.
Schiff, J. M., Fischer, M. M., Jones, A. L., and Underdown, B. J. Human IgA as a heterovalent ligand: switching from the asialoglycoprotein receptor to secretory component during transport across the rat hepatocyte. 102:920.
—, **Fisher, M. M., and Underdown, B. J.** Receptor-mediated biliary transport of immunoglobulin A and asialoglycoprotein: sorting and missorting of ligands revealed by two radiolabeling methods. 98:79.
Schiffman, E. *See* Bareis, Hirata, Schiffman, and Axelrod.
Schiffmann, E. *See* Nath, Flavin, and Schiffmann.
— *See* Russo, Liotta, Thorgeiersson, Brundage, and Schiffmann.
— *See* Seppä, Grotendorst, Seppä, Schiffmann, and Martin.
Schill, W. *See* Vicker, Schill, and Drescher.
Schiller, D. L. *See* Franke, Winter, Grund, Schmid, Schiller, and Jarasch.
— *See* Schmid, Schiller, Grund, Stadler, and Franke.
Schimke, R. T. *See* Fougere-Deschatrette, Schimke, Weil, and Weiss.
Schindler, M., Holland, J. F., and Hogan, M. Lateral diffusion in nuclear membranes. 100:1408.
—, **and Jiang, L.** Epidermal growth factor and insulin stimulate nuclear pore-mediated macromolecular transport in isolated rat liver nuclei. 104:849.
—, **and Jiang, L.-W.** Nuclear actin and myosin as control elements in nucleocytoplasmic transport. 102:859.
—, **Meiners, S., and Cheresh, D. A.** RGD-dependent linkage between plant cell wall and plasma membrane: consequences for growth. 108:1955.
—, **and Rosenbusch, J. P.** Chemical modification of matrix porin from *Escherichia coli*: probing the pore topology of a transmembrane protein. 92:742.
— *See* Baron-Epel, Hernandez, Jiang, Meiners, and Schindler.
— *See* Ho, Malek-Hedayat, Wang, and Schindler.
— *See* Jiang and Schindler.
— *See* Metcalf, Villanueva, Schindler, and Wang.
Schindler, R. *See* Zimmermann, Schaer, Muller, Schneider, Miodonski-Maculewicz, and Schindler.
Schinz, R. H., Lo, M-V. C., Larrivee, D. C., and Pak, W. L. Freeze-fracture study of the *Drosophila* photoreceptor membrane: mutations affecting membrane particle density. 93:961.
Schirrmacher, V. *See* Dennis, Waller, and Schirrmacher.
Schittny, J. C., Timpl, R., and Engel, J. High resolution immunoelectron microscopic localization of functional domains of laminin, nidogen, and heparan sulfate proteoglycan in epithelial basement membrane of mouse cornea reveals different topological orientations. 107:1599.
Schlaeppi, K., Deflorin, J., and Seebeck, T. The major component of the paraflagellar rod of *Trypanosoma brucei* is a helical protein which is encoded by two identical, tandemly linked genes. 109:1689.
Schlegel, R. A. *See* Del Buono, Williamson, and Schlegel.
— *See* Wojcieszyn, Schlegel, Lumley-Sapanski, and Jacobson.

Schlegel, W., and Wollheim, C. B. Thyrotropin-releasing hormone (TRH) increases cytosolic free Ca^{2+} in clonal pituitary cells (GH_3 cells): direct evidence for the mobilization of cellular calcium. 99:83.
Schlegel-Haueter, S. E. *See* Chou, Schlegel-Haueter.
Schleicher, M. *See* André, Brink, Gerisch, Isenberg, Noegel, Schleicher, Segall, and Wallraff.
— *See* Noegel, Rapp, Lottspeich, Schleicher, and Stewart.
— *See* Roberts, Zielinski, Schleicher, and Watterson.
— *See* Witke, Schleicher, Lottspeich, and Noegel.
Schleimer, R. P. *See* Dvorak, Hammel, Schulman, Peters, MacGlashan, Schleimer, Newball, Pyne, Dvorak, Lichtenstein, and Galli.
Schlesinger, M. J. Heat shock proteins: the search for functions. 103:321.
— *See* Collier, Heuser, Levy, and Schlesinger.
— *See* Collier and Schlesinger.
Schlesinger, P. *See* Tietze, Schlesinger, and Stahl.
Schlesinger, P. H. *See* Jamieson, Frazier, and Schlesinger.
— *See* Krogstad, Schlesinger, and Gluzman.
— *See* Natowicz, Hallett, Frier, Chi, Schlesinger, and Baenziger.
Schlessinger, J. Allosteric regulation of the epidermal growth factor receptor kinase. 103:2067.
— *See* Benveniste, Livneh, Schlessinger, and Kam.
— *See* Benveniste, Schlessinger, and Kam.
— *See* Geiger, Avnur, and Schlessinger.
— *See* Livneh, Benveniste, Prywes, Felder, Kam, and Schlessinger.
— *See* Miller, Beardmore, Kanety, Schlessinger, and Hopkins.
— *See* Scherson, Kreis, Schlessinger, Littauer, Borisy, and Geiger.
— *See* Schreiber, Schlessinger, and Edidin.
— *See* Spiegel, Schlessinger, and Fishman.
— *See* Yarden, Schreiber, and Schlessinger.
Schleuning, W.-D. *See* Cajot, Schleuning, Medcalf, Bamat, Testuz, Liebermann, and Sordat.
— *See* Genton, Kruithof, and Schleuning.
— *See* Medcalf, Van den Berg, and Schleuning.
Schliwa, M. Action of cytochalasin D on cytoskeletal networks. 92:79.
—, **Nakamura, T., Porter, K. R., and Euteneuer, U.** A tumor promoter induces rapid and coordinated reorganization of actin and vinculin in cultured cells. 99:1045.
—, **and van Blerkom, J.** Structural interaction of cytoskeletal components. 90:222.
—, **Weber, K., and Porter, K. R.** Localization and organization of actin in melanophores. 89:267.
— *See* Cooper and Schliwa.
— *See* Euteneuer and Schliwa.
— *See* Koonce and Schliwa.
— *See* Radke, Carter, Moss, Dehazya, Schliwa, and Martin.
Schloss, J. A., and Goldman, R. D. Microfilaments and tropomyosin of cultured mammalian cells: Isolation and characterization. 87:633.
— *See* Baker, Schloss, and Rosenbaum.
— *See* Keller, Schloss, Sillflow, and Rosenbaum.
Schlossman, D. M., Schmid, S. L., Braell, W. A., and Rothman, J. E. An enzyme that removes clathrin coats: purification of an uncoating ATPase. 99:723.
— *See* Braell, Schlossman, Schmid, and Rothman.
— *See* Patzer, Schlossman, and Rothman.
Schmaier, A. H. *See* Gustafon, Lukasiewicz, Wachtfogel, Norton, Schmaier, Niewiarowski, and Colman.
Schmid, E., Schiller, D. L., Grund, C., Stadler, J., and Franke, W. W. Tissue type-specific expression of intermediate filament proteins in a cultured epithelial cell line from bovine mammary gland. 96:37.
— *See* Franke, Heid, Grund, Winter, Freudenstein, Schmid, Jarasch, and Keenan.
— *See* Franke, Schmid, Freudenstein, Appelhans, Osborn, Weber, and Keenen.
— *See* Franke, Schmid, Vandekerckhove, and Weber.
— *See* Franke, Schmid, Wellsteed, Grund, Gigi, and Geiger.
— *See* Franke, Winter, Grund, Schmid, Schiller, and Jarasch.
Schmid, H-P., Köhler, K., and Setyono, B. Possible involvement of messenger RNA-associated proteins in protein synthesis. 93:893.
Schmid, S., Fuchs, R., Kielian, M., Helenius, A., and Mellman, I. Acidification of endosome subpopulation in wild-type Chinese hamster ovary cells and temperature-sensitive acidification-defective mutants. 108: 1291.
— *See* Marsh, Schmid, Kern, Harms, Male, Mellman, and Helenius.
Schmid, S. L. *See* Braell, Schlossman, Schmid, and Rothman.
— *See* Schlossman, Schmid, Braell, and Rothman.
Schmid, T. M., and Linsenmayer, T. F. Immunohistochemical localization of short chain cartilage collagen (type X) in avian tissues. 100:598.
— *See* Linsenmayer, Fitch, Schmid, Zak, Gibney, Sanderson, and Mayne.
Schmid, W. *See* Shelly, Tynan, Schmid, Schutz, and Yeoh.
Schmidt, B., Hennig, B., Zimmermann, R., and Neupert, W. Biosynthetic pathway of mitochondrial ATPase subunit 9 in *Neurospora crassa*. 96:248.
Schmidt, G., Robenek, H., Harrach, B., Glössl, J., Nolte, V., Hörmann, H., Richter, H., and Kresse, H. Interaction of small dermatan sulfate proteoglycan from fibroblasts with fibronectin. 104:1683.
Schmidt, G. W., Bartlett, S. G., Grossman, A. R., Cashmore, A. R., and Chua, N. H. Biosynthetic pathways of two polypeptide subunits of the light-harvesting chlorophyll a/b protein complex. 91:468.
— *See* Jensen, Herrin, Plumley, and Schmidt.
— *See* Mishkind, Wessler, and Schmidt.
Schmidt, H. *See* Oettling, Schmidt, and Drews.
Schmidt, J. *See* Shieh, Ballivet, and Schmidt.
— *See* Tsay and Schmidt.
Schmidt, O. *See* Kay, Schmidt, and Gall.
Schmidt, R. A., Glomset, J. A., Wight, T. N., Habenicht, A. J. R., and Ross, R. A study of the influence of mevalonic acid and its metabolites on the morphology of Swiss 3T3 cells. 95:144.
Schmidt, R. E. *See* Martin, Schmidt, DiStefano, Lowry, Carter, and Johnson.
Schmidt, R. J., Myers, A. M., Gillham, N. W., and Boynton, J. E. Chloroplast ribosomal proteins of *Chlamydomonas* synthesized in the cytoplasm are made as precursors. 98:2011.
—, **Richardson, C. B., Gillham, N. W., and Boynton, J. E.** Sites of synthesis of chloroplast ribosomal proteins in *Chlamydomonas*. 96:1451.
Schmidt, S. Y. Cytidine metabolism in photoreceptor cells of the rat. 97:824.
—. Light- and cytidine-dependent phosphatidylinositol synthesis in photoreceptor cells of the rat. 97:832.
Schmidt, W. *See* Patzak, Böck, Fischer-Colbrie, Schauenstein, Schmidt, Lingg, and Winkler.
Schmit, A.-C., and Lambert, A.-M. Characterization and dynamics of cytoplasmic F-actin in higher plant endosperm cells during interphase, mitosis, and cytokinesis. 105:2157.
Schnaar, R. L. *See* Brandley, Ross, and Schnaar.
Schnapp, B. J., and Reese, T. S. Cytoplasmic structure in rapid-frozen axons. 94:667.
— *See* Schroer, Schnapp, Reese, and Sheetz. 107:1785.
Schneck, J. *See* Horwitz, Chia, Harracksingh, Orlow, Pifko-Hirst, Schneck, Sorbara, Speaker, and Wilk.
Schneider, A., Sherwin, T., Sasse, R., Russell, D. G., Gull, K., and Seebeck, T. Subpellicular and flagellar microtubules of *Trypanosoma brucei brucei* contain the same α-tubulin isoforms. 104:431.
— *See* Sherwin, Schneider, Sasse, Seebeck, and Gull.
Schneider, B. G. *See* Chaitin, Schneider, Hall, and Papermaster.
Schneider, H., Höchli, M., and Hackenbrock, C. R. Relationship between the density distribution of intramembrane particles and electron transfer in the mitochondrial inner membrane as revealed by cholesterol incorporation. 94:387.
Schneider, J. *See* Zimmermann, Schaer, Muller, Schneider, Miodonski-Maculewicz, and Schindler.
Schneider, J. A. *See* Mendoza, Schneider, Lopez-Rivas, Sinnett-Smith, and Rozengurt.
Schneider, M. D., Sellers, J. R., Vahey, M., Preston, Y. A., and Adelstein, R. S. Localization and topography of antigenic domains within the heavy chain of smooth muscle myosin. 101:66.
— *See* Ueno, Perryman, Roberts, and Schneider.
Schneider, W. J., Slaughter, C. J., Goldstein, J. L., Anderson, R. G. W., Capra, J. D., and Brown, M. S. Use of antipeptide antibodies to demonstrate external orientation of the NH_2-terminus of the low density lipoprotein receptor in the plasma membrane of fibroblasts. 97:1635.
Schneider, Y.-J., de Duve, C., and Trouet, A. Fate of plasma membrane during endocytosis. III. Evidence for incomplete breakdown of immunoglobulins in lysosomes of cultured fibroblasts. 88:380.
Schneiderman, N. *See* Christman, Weich, Schoenbrun, Schneiderman, and Acs.
Schnell, R. A. *See* Kindle, Schnell, Fernández, and Lefebvre.
Schnitzer, J., Franke, W. W., and Schachner, M. Immunocytochemical demonstration of vimentin in astrocytes and ependymal cells of developing and adult mouse nervous system. 90:435.
Schoenbrun, B. *See* Christman, Weich, Schoenbrun, Schneiderman, and Acs.
Schoenfeld, T. A. *See* Bloom, Schoenfeld, and Vallee.
Schoevaert, D. *See* Poliard, Bernuau, Tournier, Legrès, Schoevaert, Feldmann, and Sala-Trepat.
Scholey, J. M. *See* Ingold, Cohn, and Scholey.
Scholz, M. *See* Lang, Scholz, and Peters.
Schonbrunn, A., Krasnoff, M., Westendorf, J. M., and Tashjian, A. H., Jr. Epidermal growth factor and tyrotropin-releasing hormone act similarly on a clonal pituitary cell strain. Modulation of hormone production and inhibition of cell proliferation. 85:786.

— *See* Presky and Schonbrunn.
Schonfeld, G., Grimme, N., and Alpers, D. Detection of apolipoprotein C in human and rat enterocytes. 86:562.
Schook, W. J. *See* Kohtz, Georgieva-Hanson, Kohtz, Schook, and Puszkin.
Schor, S. L., Allen, T. D., and Winn, B. Lymphocyte migration into three-dimensional collagen matrices: a quantitative study. 96:1089.
— *See* Gibson, Schor, and Grant.
Schreiber, A. B., Kenney, J., Kowalski, J., Thomas, K. A., Gemenez-Gallego, G., Rios-Candelore, M., Di Salvo, J., Barritault, D., Courty, J., Courtois, Y., Moenner, M., Loret, C., Burgess, W. H., Mehlman, T., Friesel, R., Johnson, W., and Maciag, T. A unique family of endothelial cell polypeptide mitogens: the antigenic and receptor cross-reactivity of bovine endothelial cell growth factor, brain-derived acidic fibroblast growth factor, and eye-derived growth factor-II. 101:1623.
—, Schlessinger, J., and Edidin, M. Interaction between major histocompatibility complex antigens and epidermal growth factor receptors on human cells. 98:725.
— *See* Yarden, Schreiber, and Schlessinger.
Schreiber, J. H. *See* Ernst and Schreiber.
Schreiner, C. L., Bauer, J. S., Danilov, Y. N., Hussein, S., Sczekan, M. M., and Juliano, R. L. Isolation and characterization of Chinese hamster ovary cell variants deficient in the expression of fibronectin receptor. 109:3157.
Schreiner, G. F., and Cotran, R. S. Localization of an Ia-bearing glomerular cell in the mesangium. 94:483.
Schroder, H. C., Wehland, J., and Weber, K. Purification of brain tubulin-tyrosine ligase by biochemical and immunological methods. 100:276.
Schroder, J. *See* Enns, Larrick, Suomalainen, Schroder, and Sussman.
Schroeder, C. *See* Van De Water, Schroeder, Crenshaw, and Hynes.
Schroeder, C. C. *See* Allen, Schroeder, and Fok.
Schroeder, N. A. *See* Wessels, Schroeder, Voss, Hall, Condeelis, and Soll.
Schroeder, T. E. Microfilament-mediated surface change in starfish oocytes in response to 1-methyladenine: Implications for identifying the pathway and receptor sites for maturation-inducing hormones. 90:362.
—, and Battaglia, D. E. "Spiral asters" and cytoplasmic rotation in sea urchin eggs: induction in *Strongylocentrotus purpuratus* eggs by elevated temperature. 100:1056.
— *See* Hiramoto, Hamaguchi, Shoji, Schroeder, Shimoda, and Nakamura.
Schroer, T. A., Brady, S. T., and Kelly, R. B. Fast axonal transport of foreign synaptic vesicles in squid axoplasm. 101:568.
—, Schnapp, B. J., Reese, T. S., and Sheetz, M. P. The role of kinesin and other soluble factors in organelle movement along microtubules. 107:1785.
Schubart, U. K., and Fields, K. L. Identification of a calcium-regulated insulinoma cell phosphoprotein as an islet cell keratin. 98:1001.
Schubert, D., and LaCorbiere, M. Isolation of a cell-surface receptor for chick neural retina adherons. 100:56.
—, and LaCorbiere, M. Isolation of an adhesion-mediating protein from chick neural retina adherons. 101:1071.
—, and LaCorbiere, M. Properties of extracellular adhesion-mediating particles in a myoblast clone and its adhesion-deficient variant. 94:108.
—, LaCorbiere, M., and Esch, F. A chick neural retina adhesion and survival molecule is a retinol-binding protein. 102:2295.
—, LaCorbiere, M., Klier, F. G., and Birdwell, C. A role for adherons in neural retina cell adhesion. 96:990.
—, Ling, N., and Baird, A. Multiple influences of a heparin-binding growth factor on neuronal development. 104:635.
— *See* Cole, Schubert, and Glaser.
— *See* Tsui, Schubert, and Klein.
Schuetze, S. M., and Goodenough, D. A. Dye transfer between cells of the embryonic chicken lens becomes less sensitive to CO_2 treatment with development. 92:694.
Schuler, G., Hintner, H., Wolff, K., Fritsch, P., and Stingl, G. In vitro complement-binding on cytoplasmic structures in normal human skin: immunoelectronmicroscopic studies. 95:543.
Schulman, E. S. *See* Dvorak, Hammel, Schulman, Peters, MacGlashan, Schleimer, Newball, Pyne, Dvorak, Lichtenstein, and Galli.
— *See* Hammel, Dvorak, Peters, Schulman, Dvorak, Lichtenstein, and Galli.
Schulman, H. Phosphorylation of microtubule-associated proteins by a Ca^{2+}/calmodulin-dependent protein kinase. 99:11.
— *See* Nose, Griffith, and Schulman.
Schulman, I. G., Cook, R. G., Richman, R., and Allis, C. D. *Tetrahymena* contain two distinct and unusual high mobility group (HMG)–like proteins. 104:1485.
— *See* Roth, Schulman, Richman, Cook, and Allis.
Schulman, S. *See* Ziomek, Schulman, and Edidin.
Schultheiss, R. *See* Mandelkow, Schultheiss, Rapp, Müller, and Mandelkow.
Schultheiss, T. *See* Lin, Holtzer, Schultheiss, Murray, Masaki, Fischman, and Holtzer.
Schultz, E. *See* Wang, Greaser, Schultz, Bulinski, Lin, and Lessard.
Schultz, N. *See* Feldherr, Kallenbach, and Schultz.
Schultz, R. M. *See* Freter and Schultz.
Schulze, D. *See* McFadden, Schulze, Surek, Salisbury, and Melkonian.
Schulze, E., Asai, D. J., Bulinski, J. C., and Kirschner, M. Post-translational modification and microtubule stability. 105:2167.
—, and Kirschner, M. Dynamic and stable populations of microtubules in cells. 104:277.
—, and Kirschner, M. Microtubule dynamics in interphase cells. 102:1020.
Schulze-Lohoff, E., Hasilik, A., and von Figura, K. Cathepsin D precursors in clathrin-coated organelles from human fibroblasts. 101:824.
Schuster, G., Dewit, M., Staehelin, L. A., and Ohad, I. Transient inactivation of the thylakoid photosystem II light-harvesting protein kinase system and concomitant changes in intramembrane pparticle size during photoinhibition of *Chlamydomonas reinhardtii*. 103:71.
Schutz, G. *See* Shelly, Tynan, Schmid, Schutz, and Yeoh.
Schwab, B., III. *See* Cooper, Bryan, Schwab, Frieden, Loftus, and Elson.
Schwab, M. E., and Thoenen, H. Mechanism of uptake and retrograde axonal transport of noradrenaline in sympathetic neurons in culture: reserpine-resistant large dense-core vesicles as transport vehicles. 96:1538.
— *See* Caroni and Schwab.
— *See* Paganetti, Caroni, and Schwab.
Schwaiger, M., Herzog, V., and Neupert, W. Characterization of translocation contact sites involved in the import of mitochondrial proteins. 105:235.
Schwartz, A. L., Bolognesi, A., and Fridovich, S. E. Recycling of the asialoglycoprotein receptor and the effect of lysosomotropic amines in hepatoma cells. 98:732.
— *See* Geuze, Slot, and Schwartz.
— *See* Geuze, Slot, Strous, Lodish, and Schwartz.
— *See* Stoorvogel, Geuze, Griffith, Schwartz, and Strous.
— *See* Strous, Du Maine, Zijderhand-Bleekemolen, Slot, and Schwartz.
— *See* Zijderhand-Bleekemolen, Schwartz, Slot, Strous, and Geuze.
Schwartz, E., Bienkowski, R. S., Coltoff-Schiller, B., Goldfischer, S., and Bluenfeld, O. O. Changes in the components of extracellular matrix and in growth properties of cultured aortic smooth muscle cells upon ascorbate feeding. 92:462.
Schwartz, E. A. First events in vision: The generation of responses in vertebrate rods. 90:271.
Schwartz, G. J. *See* Satlin and Schwartz.
Schwartz, H. W., III. *See* Ferguson, Franzini-Armstrong, and Schwartz.
Schwartz, J. H. *See* Eppler, Bayley, Greenberg, and Schwartz.
— *See* Hall, Lubit, and Schwartz.
— *See* Lubit and Schwartz.
— *See* Saitoh and Schwartz.
— *See* Swanson, Elste, Greenberg, Schwartz, Aldrich, and Furth.
Schwartz, M. A., and Luna, E. J. Binding and assembly of actin filaments by plasma membranes from *Dictyostelium discoideum*. 102:2067.
—, and Luna, E. J. How actin binds and assembles onto plasma membrane from *Dictyostelium discoideum*. 107:201.
— *See* Tranter, Sugrue, and Schwartz.
Schwartz, N. B. *See* Campbell and Schwartz.
Schwartz, R. H. *See* McCoy, Gal, Schwartz, and Gottesman.
Schwartz, R. J. *See* Hayward and Schwartz.
— *See* Hayward, Zhu, and Schwartz.
— *See* Ruzicka and Schwartz.
Schwartz, S. M. *See* Chen, Thiagarajan, Schwartz, Harlan, and Heimark.
— *See* Gajdusek, Dicorleto, Ross, and Schwartz.
— *See* Heimark and Schwartz.
Schwartz, T. W. *See* Madsen, Larsson, Rehfeld, Schwartz, Lernmark, Labrecque, and Steiner.
Schwarz, H. *See* Roditi, Schwarz, Pearson, Beecroft, Liu, Richardson, Büring, Pleiss, Bülow, Williams, and Overath.
— *See* Vogel, Thilo, Schwarz, and Steinhart.
Schwarz, W. H. *See* Sato, Schwarz, Selden, and Pollard.
Schwarzbauer, J. E., Spencer, C. S., and Wilson, C. L. Selective secretion of alternatively spiced fibronectin variants. 109:3445.
Schwechheimer, K. *See* Kartenbeck, Schwechheimer, Moll, and Franke.
Schweitzer, B. *See* Volloch, Schweitzer, and Rits.
Schweitzer, E. S., and Kelly, R. B. Selective packaging of human growth hormone into synaptic vesicles in a rat neuronal (PC12) cell line. 101:667.
Schweitzer, J. B. *See* DiStefano, Schweitzer, Taniuchi, and Johnson.
Schweizer, A., Fransen, J., Bächi, T., Ginsel, L., and Hauri, H. P. Identification, by a monoclonal antibody, of a 53-kD protein associated with a tubulo-vesicular compartment at the *cis*-side of the Golgi apparatus. 107:1643.

Schweizer, J. *See* Rentrop, Knapp, Winter, and Schweizer.
Schweppe, J. S. *See* Kuettel, Squinto, Kwast-Welfeld, Schwoch, Schweppe, and Jungmann.
Schwerzmann, K., Cruz-Orive, L. M., Eggmann, R., Sänger, A., and Weibel, E. R. Molecular architecture of the inner membrane of mitochondria from rat liver: a combined biochemical and stereological study. 102:97.
Schwimmer, R. *See* Fairbairn, Gilbert, Ojakian, Schwimmer, and Quigley.
— *See* Ojakian and Schwimmer.
Schwoch, G. *See* Kuettel, Squinto, Kwast-Welfeld, Schwoch, Schweppe, and Jungmann.
Scofield, G. N. *See* Pennell, Knox, Scofield, Selvendran, and Roberts.
Scott, B. K. *See* Wolf, Scott, and Millette.
Scott, G. *See* Halaban, Langdon, Birchall, Cuono, Baird, Scott, Moellmann, and McGuire.
Scott, R. E., Hoerl, B. J., Wille, J. J., Jr., Florine, D. L., Krawisz, B. R., and Yun, K. Coupling of proadipocyte growth arrest and differentiation. II. A cell cycle model for the physiological control of cell proliferation. 94:400.
— *See* Krawisz and Scott.
— *See* Minoo, Sullivan, Solomon, Martin, Toft, and Scott.
— *See* Wier and Scott.
Scott, S. *See* Singer, Kawka, Scott, Mumford, and Lark.
— *See* Singer, Scott, Kawka, and Kazazis.
— *See* Singer, Scott, Kawka, Kazazis, Gailit, and Ruoslahti.
Scott, W. A. *See* Aderem, Scott, and Cohn.
Scullion, B. F., Hou, Y., Puddington, L., Rose, J. K., and Jacobson, K. Effects of mutations in three domains of the vesicular stomatitis viral glycoprotein on its lateral diffusion in the plasma membrane. 105:69.
Sczekan, M. M. *See* Schreiner, Bauer, Danilov, Hussein, Sczekan, and Juliano.
Seagrave, J. C. *See* Oliver, Seagrave, Pfeiffer, Feibig, and Deanin.
— *See* Pfeiffer, Seagrave, Davis, Deanin, and Oliver.
Seagull, R. W., Falconer, M. M., and Weerdenburg, C. A. Microfilaments: dynamic arrays in higher plant cells. 104:995.
— *See* Wick, Seagull, Osborn, Weber, and Gunning.
Sealock, R. Cytoplasmic surface structure in postsynaptic membranes from electric tissue visualized by tannic-acid-mediated negative contrasting. 92:514.
—, **Wray, B. E., and Froehner, S. C.** Ultrastructural localization of the M_r 43,000 protein and the acetylcholine receptor in *Torpedo* postsynaptic membranes using monoclonal antibodies. 98:2239.
— *See* Froehner, Murnane, Tobler, Peng, and Sealock.
— *See* LaRochelle, Wray, Sealock, and Froehner.
Seaton, P. *See* Doherty, Barton, Dickson, Seaton, Rowett, Moore, Gower, and Walsh.
Sedat, J. W. *See* Belmont, Sedat, and Agard.
— *See* Gruenbaum, Landesman, Drees, Bare, Saumweber, Paddy, Sedat, Smith, Benton, and Fisher.
— *See* Hochstrasser, Mathog, Gruenbaum, Saumweber, and Sedat.
— *See* Hochstrasser and Sedat.
— *See* Minden, Agard, Sedat, and Alberts.
Seebeck, T. *See* Schlaeppi, Deflorin, and Seebeck.
— *See* Schneider, Sherwin, Sasse, Russell, Gull, and Seebeck.
— *See* Sherwin, Schneider, Sasse, Seebeck, and Gull.
Seeds, N. W. *See* Krystosek and Seeds.
— *See* Verrall and Seeds.
Seeley, P. J., Rukenstein, A., Connolly, J. L., and Greene, L. A. Differential inhibition of nerve growth factor and epidermal growth factor effects of the PC12 pheochromocytoma line. 98:417.
— *See* Burstein, Seeley, and Greene.
Seetharam, B. *See* Levine, Allen, Alpers, and Seetharam.
Sefton, B. M., and Buss, J. E. The covalent modification of eukaryotic proteins with lipid. 104:1449.
Segal, A. W., Dorling, J., and Coade, S. Kinetics of fusion of the cytoplasmic granules with phagocytic vacuoles in human polymorphonuclear leukocytes. Biochemical and morphological studies. 85:42.
— *See* Roberts, Cross, Jones, and Segal.
Segal, M. *See* Kingsley, Kozarsky, Segal, and Krieger.
Segal, R. *See* Hsieh, Segal, and Chen.
Segal, R. A., Huang, B., Ramanis, Z., and Luck, D. J. L. Mutant strains of *Clamydomonas reinhardtii* that move backwards only. 98:2026.
—, **and Luck, D. J. L.** Phosphorylation in isolated *Chlamydomonas* axonemes: a phosphoprotein may mediate the Ca^{2+}-dependent photophobic response. 101:1702.
Segall, J. E., Fisher, P. R., and Gerisch, G. Selection of chemotaxis mutants of *Dictyostelium discoideum*. 104:151.
— *See* André, Brink, Gerisch, Isenberg, Noegel, Schleicher, Segall, and Wallraff.
Segall, R. R. *See* Salmon and Segall.
Seglen, P. O., and Gordon, P. B. Amino acid control of autophagic sequestration and protein degradation in isolated rat hepatocytes. 99:435.
Segui-Real, B. *See* Laurie, Horikoshi, Killen, Segui-Real, and Yamada.
Seibert, M., DeWitt, and Staehelin, L. A. Structural localization of the O_2-evolving apparatus to multimeric (tetrameric) particles on the lumenal surface of freeze-etched photosynthetic membranes. 105:2257.
Seidman, L. *See* Rodman, Seidman, and Farquhar.
Seifert, S. C. *See* Evinger-Hodges, Ewton, Seifert, and Florini.
Seiler, S. *See* Saito, Seiler, Chu, and Fleischer.
Seilheimer, B., Persohn, E., and Schachner, M. Antibodies to the L1 adhesion molecule inhibit Schwann ensheathment of neurons in vitro. 109:3095.
—, **Persohn, E., and Schachner, M.** Neural cell adhesion molecule expression is regulated by Schwann cell–neuron interactions in culture. 108:1909.
—, **and Schachner, M.** Studies of adhesion molecules mediating interaction between cells of peripheral nervous system indicate a major role for the L1 in mediating sensory neuron growth on Schwann cells in culture. 107:341.
Sejersen, T. *See* Sjölund, Hedin, Sejersen, Heldin, and Thyberg.
Sekita, S. *See* Yahara, Harada, Sekita, Yoshihira, and Natori.
Selden, S. C. *See* Sato, Schwarz, Selden, and Pollard.
Sellers, J. R., Spudich, J. A., and Sheetz, M. P. Light chain phosphorylation regulates the movement of smooth muscle myosin on actin filaments. 101:1897.
— *See* Schneider, Sellers, Vahey, Preston, and Adelstein.
Sellitto, C., and Kuriyama, R. Distribution of a matrix component of the midbody during the cell cycle in Chinese hamster ovary cells. 106:431.
Selvendran, R. R. *See* Pennell, Knox, Scofield, Selvendran, and Roberts.
Sen, A. *See* Keski-Oja, Sen, and Todaro.
Sen, S. *See* Teeter, Atsumi, Sen, and Kuo.
Sendtner, M. *See* Saadat, Sendtner, and Rohrer.
Senior, A., and Gerace, L. Integral membrane protein specific to the inner nuclear membrane and associated with the nuclear lamina. 107:2029.
— *See* Holt, Snow, Senior, Haltiwanger, Gerace, and Hart.
— *See* Snow, Senior, and Gerace.
Senior, R. M., Griffin, G. L., Mecham, R. P., Wrenn, D. S., Prasad, K. U., and Urry, D. W. Val-Gly-Val-Ala-Pro-Gly, a repeating peptide in elastin, is chemotactic for fibroblasts and monocytes. 99:870.
—, **Griffin, G. L., San Huang, J., Walz, D. A., and Deuel, T. F.** Chemotactic activity of platelet alpha granule proteins for fibroblasts. 96:382.
—, **Huang, J. S., Griffin, G. L., and Deuel, T. F.** Dissociation of the chemotactic and mitogenic activities of platelet-derived growth factor by human neutrophil elastase. 100:351.
— *See* Malone, Teitelbaum, Griffin, Senior, and Kahn.
— *See* Mecham, Griffin, Madaras, and Senior.
— *See* Mecham, Madaras, and Senior.
— *See* Pierce, Mustoe, Lingelbach, Masakowski, Griffin, Senior, and Deuel.
Sen-Majumdar, A. *See* Murthy, Basu, Sen-Majumdar, and Das.
Sensabaugh, G. *See* Friedman, Blankenberg, Sensabaugh, and Tenforde.
Sepanski, M. A. *See* Pagano, Sepanski, and Martin.
Seppä, H., Grotendorst, G., Seppä, S., Schiffmann, E., and Martin, G. R. Platelet-derived growth factor is chemotactic for fibroblasts. 92:584.
Seppä, H. E. J. *See* Baron-Van Evercooren, Kleinman, Seppä, Rentier, and Dubois-Dalcq.
Seppä, S. *See* Seppä, Grotendorst, Seppä, Schiffmann, and Martin.
Sepsenwol, S., Ris, H., and Roberts, T. M. A unique cytoskeleton associated with crawling in the amoeboid sperm of the nematode *Ascaris suum*. 108:55.
Serrano, L., Diáz-Nido, J., Wandosell, F., and Avila, J. Tubulin phosphorylation by casein kinase II is similar to that found in vivo. 105:1731.
See Díaz-Nido, Serrano, Méndez, and Avila.
Serunian, L. A. *See* Christensen, LeStourgeon, Jamrich, Howard, Serunian, Silver, and Elgin.
Sette, M. *See* Kim, Shuman, Sette, and Przybyla.
Setterfield, G. *See* Chaly, Bladon, Setterfield, Little, Kaplan, and Brown.
Setyono, B. *See* Mayrand, Setyono, Greenberg, and Pederson.
— *See* Schmid, Köhler, and Setyono.
Severina, I. I., Skulachev, V. P., and Zorov, D. B. Coupling membranes as energy-transmitting cables. II. Cyanobacterial trichomes. 107:497.
Severinsson, L., and Peterson, P. A. Abrogation of cell surface expression of human class I transplantation antigens by an adenovirus protein in *Xenopus laevis* oocytes. 101:540.
—, **and Peterson, P. A.** β_2-Microglobulin induces intracellular transport of human class I transplantation antigen heavy chains in *Xenopus laevis*

oocytes. 99:226.
Severs, N. J. *See* Green and Severs.
Seyedin, S. M., Thompson, A. Y., Rosen, D. M., and Piez, K. A. In vitro induction of cartilage-specific macromolecules by a bone extract. 97:1948.
Seyer, J. *See* Sugrue, Gordon, Seyer, Dublet, van der Rest, and Olsen.
Seyer, J. M. *See* Postlethwaite, Raghow, Stricklin, Poppleton, Seyer, and Kang.
Sha'afi, R. I., Shefcyk, J., Yassin, R., Molski, T. F. P., Volpi, M., Naccache, P. H., White, J. R., Feinstein, M. B., and Becker, E. L. Is a rise in intracellular concentration of free calcium necessary or sufficient for stimulated cytoskeletal-associated actin? 102:1459.
— *See* Becker, Kermode, Naccache, Yassin, Marsh, Munoz, and Sha'afi.
— *See* Yassin, Shefcyk, White, Tao, Volpi, Molski, Naccache, Feinstein, and Sha'afi.
Shadle, P. J., and Barondes, S. H. Adhesion of human platelets to immobolized trimeric collagen. 95:361.
—, **and Barondes, S. H.** Platelet-collagen adhesion: evidence for participation of antigenically distinct entities. 99:2048.
—, **Ginsberg, M. H., Plow, E. F., and Barondes, S. H.** Platelet-collagen adhesion: inhibition by a monoclonal antibody that binds glycoprotein IIb. 99:2056.
Shafiq, S. *See* Reinach, Masaki, Shafiq, Obinata, and Fischman.
Shafiq, S. A. *See* Zhang, Shafiq, and Bader.
Shafritz, D. A. *See* Saber, Shafritz, and Zern.
Shah, A. J. *See* Kay, Shah, and Halstead.
Shain, W., Forman, D. S., Madelian, V., and Turner, J. N. Morphology of astroglial cells is controlled by β-adrenergic receptors. 105:2307.
Shanley, D. J. *See* Pacifici, Soltesz, Thal, Shanley, Boettiger, and Holtzer.
Shannon, J. M. *See* Cunha, Fujii, Neubauer, Shannon, Sawyer, and Reese.
Shannon, W. A., Jr. *See* Brown, Shannon, and Snell.
Shaper, J. H. *See* Fields and Shaper.
— *See* Lopez, Bayna, Litoff, Shaper, Shaper, and Shur.
Shaper, N. L. *See* Lopez, Bayna, Litoff, Shaper, Shaper, and Shur.
Shapiro, B. M. *See* Battaglia and Shapiro.
— *See* Gunderson and Shapiro.
— *See* Weidman, Kay, and Shapiro.
— *See* Weidman and Shapiro.
Shapland, C., Lowings, P., and Lawson, D. Identification of new actin-associated polypeptides that are modified by viral transformation and changes in cell shape. 107:153.
Sharkey, D. J. *See* Kerjaschki, Sharkey, and Farquhar.
Sharp, G. *See* Nyman, Hallman, Hadlaczky, Pettersson, Sharp, and Ringertz.
Shatz, C. J. *See* Chun and Shatz.
Shaw, K. E. S. *See* Hardwick, Shaw, Wills, and Hunter.
Shaw, L. M. *See* Mercurio and Shaw.
Shaw, P. J. *See* Traas, Doonan, Rawlins, Shaw, Watts, and Lloyd.
Shea, D. *See* Mar, Lee, Shea, and Walsh.
Shea, D. K., and Walsh, C. J. mRNAs for α- and β-tubulin and flagellar calmodulin are among those coordinately regulated when *Naegleria gruberi* amebae differentiate into flagellates. 105:1303.
Shea, E. *See* Buck, Shea, Duggan, and Horwitz.
Shear, C. R., and Bloch, R. J. Vinculin in subsarcolemmal densities in chicken skeletal muscle: localization and relationship to intracellular and extracellular structures. 101:240.
Shearer, G. M. *See* Hochman, Levy, Mador, Gottesman, Shearer, and Okon.
Shechter, A. *See* Heidemann, Joshi, Shechter, Fletcher, and Bothwell.
Sheehan, M. A., Mills, A. D., Sleeman, A. M., Laskey, R. A., and Blow, J. J. Steps in the assembly of replication-competent nuclei in a cell-free system from *Xenopus* eggs. 106:1.
Sheetz, M. P., Chasan, R., and Spudich, J. A. ATP-dependent movement of myosin in vitro: characterization of a quantitative assay. 99:1867.
— *See* Alhanaty and Sheetz.
— *See* Flicker, Peltz, Sheetz, Parham, and Spudich.
— *See* Mooseker, Conzelman, Coleman, Heuser, and Sheetz.
— *See* Schroer, Schnapp, Reese, and Sheetz. 107:1785.
— *See* Sellers, Spudich, and Sheetz.
Shefcyk, J. *See* Sha'afi, Shefcyk, Yassin, Molski, Volpi, Naccache, White, Feinstein, and Becker.
— *See* Yassin, Shefcyk, White, Tao, Volpi, Molski, Naccache, Feinstein, and Sha'afi.
Sheffield, W. P. *See* Nguyen, Argan, Sheffield, Bell, Shields, and Shore.
Shekhonin, B. V. *See* Glukhova, Frid, Shekhonin, Vasilevskaya, Grunwald, Saginati, and Koteliansky.
Shelanski, M. *See* Keith, Feramisco, and Shelanski.
Shelanski, M. L. *See* Greene, Liem, and Shelanski.
— *See* Keith, DiPaola, Maxfield, and Shelanski.
— *See* Leterrier, Liem, and Shelanski.
— *See* Ratan, Maxfield, and Shelanski.
Shelden, E. *See* Wadsworth, Shelden, Rupp, and Rieder.
Shelly, L. L., Tynan, W., Schmid, W., Schutz, G., and Yeoh, G. C. T. Hepatocyte differentiation in vitro: initiation of tyrosine aminotransferase expression in cultured fetal rat hepatocytes. 109:3043.
Shelton, D. L., and Reichardt, L. F. Studies on the regulation of beta-nerve growth factor gene expression in the rat iris: the level of mRNA-encoding nerver growth factor is increased in irises placed in explant cultures in vitro, but not in irises deprived of sensory or sympathetic innervation in vivo. 102:1940.
Shen, A. C.-Y. *See* Jorgensen, Shen, Arnold, Leung, and Campbell.
— *See* Jorgensen, Shen, and Campbell.
— *See* Jorgensen, Shen, Campbell, and MacLennan.
— *See* Jorgensen, Shen, Daly, and MacLennan.
— *See* Jorgensen, Shen, MacLennan, and Tokuyasu.
Shen, B. W., Josephs, R., and Steck, T. L. Ultrastructure of the intact skeleton of human erythrocyte membrane. 102:997.
—, **Josephs, R., and Steck, T. L.** Ultrastructure of unit fragments of the skeleton of the human erythrocyte membrane. 99:810.
Shen, I. *See* Knaack, Shen, Salpeter, and Podleski.
Shen, J. *See* Subjeck, Shyy, Shen, and Johnson.
Shen, S. S., and Burgart, L. J. Intracellular sodium activity in the sea urchin egg during fertilization. 101:420.
Shepherd, J. H., Mulvihill, E. R., Thomas, P. S., and Palmiter, R. D. Commitment of chick oviduct tubular gland cells to produce ovalbumin mRNA during hormonal withdrawal and restimulation. 87:142.
Sheppard, J. R. *See* Atkinson, Menko, Johnson, Sheppard, and Sheridan.
— *See* Howard and Sheppard.
— *See* Wiser, Wood, Eaton, and Sheppard.
Shepro, D. *See* Kelley, D'Amore, Hechtman, and Shepro.
Sher, E., Denis-Donini, S., Zanini, A., Bisiani, C., and Clementi, F. Human neuroblastoma cells acquire regulated secretory properties and different sensitivity to Ca^{2+} and α-latrotoxin after exposure to differentiating agents. 108:2291.
Sheridan, J. D. *See* Atkinson, Menko, Johnson, Sheppard, and Sheridan.
— *See* Larson and Sheridan.
Sherline, P., and Mascardo, R. Epidermal growth factor-induced centrosomal separation: mechanism and relationship to mitogenesis. 95:316.
—, **and Mascardo, R. N.** Epidermal growth factor induces rapid centrosomal separation in HeLa and 3T3 cells. 93:507.
— *See* Lewis, Sherline, and Cowan.
— *See* Lewis, Villasante, Sherline, and Cowan.
— *See* Weatherbee, Sherline, Mascardo, Izant, Luftig, and Weihing.
Sherman, I. W. *See* Gruenberg, Allred, and Sherman.
— *See* Winograd and Sherman.
Sherman, M. I. *See* Barkai and Sherman.
— *See* McCue, Gubler, Sherman, and Cohen.
Sherry, B., and Cerami, A. Cachectin/tumor necrosis factor exerts endocrine, paracrine, and autocrine control of inflammatory responses. 107:1269.
Sherwin, T., Schneider, A., Sasse, R., Seebeck, T., and Gull, K. Distinct localization and cell cycle dependence of COOH terminally tyrosinolated α-tubulin in the microtubules of *Trypanosoma brucei brucei*. 104:439.
— *See* Schneider, Sherwin, Sasse, Russell, Gull, and Seebeck.
Sherwood, J. A. *See* Howard, Lyon, Uni, Saul, Aley, Klotz, Panton, Sherwood, Marsh, Aikawa, and Rock.
— *See* Roberts, Sherwood, and Ginsburg.
Sheterline, P., and Hopkins, C. R. Transmembrane linkage between surface glycoproteins and components of the cytoplasm in neutrophil leukocytes. 90:743.
Shevlin, P. *See* Hartwig and Shevlin.
Shia, M. A. *See* Bischoff, Libresco, Shia, and Lodish.
— *See* Pilch, Shia, Benson, and Fine.
Shia, S.-P. *See* Marnell, Mathis, Stookey, Shia, Stone, and Draper.
Shibayama, T., Carboni, J. M., and Mooseker, M. S. Assembly of the intestinal brush border: appearance and redistribution of microvillar core proteins in developing chick enterocytes. 105:335.
Shieh, B. H., Ballivet, M., and Schmidt, J. Quantitation of an alpha subunit splicing intermediate: evidence for transcriptional activation in the control of acetylcholine receptor expression in denervated chick skeletal muscle. 104:1337.
Shields, D. *See* Eskridge and Shields.
— *See* Green and Shields.
— *See* Kenter, Warren, Shields, and Birshtein.
— *See* Nguyen, Argan, Sheffield, Bell, Shields, and Shore.
— *See* Stoller and Shields.
Shields, J. M. *See* Haston, Shields, and Wilkinson.
Shimada, Y. *See* Toyota and Shimada.
Shiman, R. *See* Baker, Jefferson, and Shiman.

Shimizu, N., Shimizu, Y., and Fuller, B. B. Cell-cycle analysis of insulin binding and internalization on mouse melanoma cells. 88:241.
— *See* Hirai, Gamou, Minoshima, and Shimizu.
Shimizu, T., Dennis, J. E., Masaki, T., and Fischman, D. A. Axial arrangement of the myosin rod in vertebrate thick filaments: immunoelectron microscopy with a monoclonal antibody to light meromyosin. 101:1115.
— *See* Dennis, Shimizu, Reinach, and Fischman.
Shimizu, Y. *See* Shimizu, Shimizu, and Fuller.
Shimmen, T. *See* Kohno and Shimmen.
Shimoda, S. *See* Hiramoto, Hamaguchi, Shoji, Schroeder, Shimoda, and Nakamura.
— *See* Hiramoto, Hamaguchi, Shoji, and Shimoda.
Shimosato, Y. *See* Shimoyama, Yoshida, Terada, Shimosato, Abe, and Hirohashi.
—, Yoshida, T., Terada, M., Shimosato, Y., Abe, O., and Hirohashi, S. Molecular cloning of a human Ca^{2+}-dependent cell–cell adhesion molecule homologous to mouse placental cadherin: its low expression in human placental tissues. 109:1787.
Shimura, K. *See* Takei, Kikuchi, Kikuchi, Mizuno, and Shimura.
— *See* Takei, Oyama, Kimura, Hyodo, Mizuno, and Shimura.
Shin, H.-C. *See* Imam, Buchanan, Shin, and Snell.
Shine, H. D., and Sidman, R. L. Immunoreactive myelin basic proteins are not detected when shiverer mutant Schwann cells and fibroblasts are co-cultured with normal neurons. 98:1291.
Shinefeld, L. A. *See* Howard, Abmayr, Shinefeld, Sato, and Elgin.
Shio, H. *See* Alexson, Fujiki, Shio, and Lazarow.
— *See* Falcone, Mateo, Shio, Minick, and Fowler.
— *See* Fujiki, Fowler, Shio, Hubbard, and Lazarow.
— *See* Sam-Yellowe, Shio, and Perkins.
Shiomura, Y., and Hirokawa, N. Colocalization of microtubule-associated protein 1A and microtubule-associated protein 2 on neuronal microtubules in situ revealed with double-label immuno-electron microscopy. 104:1575.
— *See* Hirokawa, Shiomura, and Okabe.
Shipley, G. L. *See* Adlakha, Shipley, Zhao, Jones, Wright, Rao, and Sauer.
Shirinsky, V. P., Antonov, A. S., Birukov, K. G., Sobolevsky, A. B., Romanov, Y. A., Kabaeva, N. V., Antonova, G. N., and Smirnov, V. N. Mechano-chemical control of human endothelium orientation and size. 109:331.
Shoji, Y. *See* Hiramoto, Hamaguchi, Shoji, Schroeder, Shimoda, and Nakamura.
— *See* Hiramoto, Hamaguchi, Shoji, and Shimoda.
Shooter, E. M. *See* Drubin, Feinstein, Shooter, and Kirschner.
— *See* Gunning, Landreth, Bothwell, and Shooter.
— *See* Majack, Castle, Goodman, Weisgraber, Mahley, Shooter, and Gebicke-Haerter.
— *See* Müller, Ignatius, Hangen, and Shooter.
— *See* Tiercy and Shooter.
— *See* Vale and Shooter.
Shore, G. C. *See* Bergeron, Kotwal, Levine, Bilan, Rachubinski, Hamilton, Shore, and Ghosh.
— *See* Liu, Bell, Freeman, and Shore.
— *See* Nguyen, Argan, Sheffield, Bell, Shields, and Shore.
— *See* Nguyen, Bell, and Shore.
Showell, H. J. *See* Cramer, Milks, Brontoli, Ojakian, Wright, and Showell.
Showman, R. M. *See* Heidaran, Showman, and Kistler.
Shows, T. B. *See* Warrick, Hsiung, Shows, and Kucherlapati.
Shpetner, H. S., Paschal, B. M., and Vallee, R. B. Characterization of the microtubule-activated ATPase of brain cytoplasmic dynein (MAP 1C). 107:1001.
— *See* Paschal, Shpetner, and Vallee.
Shriver, K., and Rohrschneider, L. Organization of $pp60^{src}$ and selected cytoskeletal proteins within ahesion plaques and junctions of Rous sarcoma virus-transformed rat cells. 89:525.
Shull, G. E. *See* Small, Shull, Santoni, and Akeson.
Shulman, R. G. *See* Gillies, Ogino, Shulman, and Ward.
Shuman, H. *See* Somylo, Gonzalez-Serratos, Shuman, McClellan, and Somlyo.
Shuman, J. *See* Kim, Shuman, Sette, and Przybyla.
Shuman, M. A. *See* Isaacs, Savion, Gospodarowicz, and Schuman.
— *See* Isenberg, McEver, Phillips, Shuman, and Bainton.
— *See* Stenberg, McEver, Shuman, Jacques, and Bainton.
— *See* Stenberg, Shuman, Levine, and Bainton.
Shur, B. D., and Hall, N. G. A role for mouse sperm surface galactosyltransferases in sperm binding to the egg zona pellucida. 95:574.
—, and Hall, N. G. Sperm surface galatosyltransferase activities during in vitro capacitation. 95:567.
— *See* Eckstein and Shur.
— *See* Lopez, Bayna, Litoff, Shaper, Shaper, and Shur.
— *See* Lopez and Shur.
— *See* Runyan, Maxwell, and Shur.
— *See* Runyan, Versalovic, and Shur.
Shyamala, G. *See* Haslam and Shyamala.
Shyng, S.-L., and Salpeter, M. M. Degradation rate of acetylcholine receptors inserted into denervated vertebrate neuromuscular junctions. 108:647.
Shyy, T. *See* Subjeck, Shyy, Shen, and Johnson.
Shyy, T.-T., Asch, B. B., and Asch, H. L. Concurrent collapse of keratin filaments, aggregation of organelles, and inhibition of protein synthesis during the heat shock response in mammary epithelial cells. 108:997.
Sibley, L. D., Krahenbuhl, J. L., Adams, G. M. W., and Weidner, E. *Toxoplasma* modifies macrophage phagosomes by secretion of a vesicular network rich in surface proteins. 103:867.
Sidman, R. L. *See* Shine and Sidman.
Sieber, F., and Roseman, S. Quantitative analysis of intercellular adhesive specificity in freshly explanted and cultured cells. 90:55.
Siefring, G. E., Jr. *See* Gudewicz, Molnar, Lai, Beezhold, Siefring, Credo, and Lorand.
Siegel, A. *See* Lenhard, Siegel, and Free.
Siegel, C. O., Jordan, A. E., and Miller, K. R. Addition of lipid to the photosynthetic membrane: effects on membrane structure and energy transfer. 91:113.
Siegel, D. L., and Branton, D. Partial purification and characterization of an actin-bundling protein, band 4.9, from human erythrocytes. 100:775.
Siegel, E. J. *See* Mroczkowski, Dym, Siegel, and Heywood.
Siegel, N. R. *See* Fambrough, Takeyasu, Lippincott-Schwartz, and Siegel.
Siegel, V., and Walter, P. Elongation arrest is not a prerequisite for secretory protein translocation across the microsomal membrane. 100:1913.
Siekevitz, P. *See* Carlin, Bartelt, and Siekevitz.
— *See* Carlin, Grab, Cohen, and Siekevitz.
— *See* Carlin, Grab, and Siekevitz.
— *See* Grab, Carlin, and Siekevitz.
Sikstrom, R. A. *See* Bergeron, Rachubinski, Sikstrom, Posner, and Paiement.
— *See* Paiement, Rachubinski, Ng Ying Kin, Sikstrom, and Bergeron.
Silbert, J. E. *See* Brody, Vaccaro, Gill, and Silbert.
— *See* Laterra, Silbert, and Culp.
— *See* Simionescu, Simionescu, Silbert, and Palade.
Silciano, J. D. *See* Stevenson, Siliciano, Mooseker, and Goodenough.
Silhavy, T. J. *See* Emr, Hall, and Silhavy.
— *See* Emr and Silhavy.
Siliciano, J. D'A. *See* Pardo, Siliciano, and Craig.
Silkstrom, R. A. *See* Bergeron, Rachubinski, Sikstrom, Posner, and Paiement.
Sillflow, C. D. *See* Keller, Schloss, Sillflow, and Rosenbaum.
— *See* McKeithan, Lefebvre, Sillflow, and Rosenbaum.
Sillman, A. L. *See* Dubreuil, Byers, Sillman, Bar-Zvi, Goldstein, and Branton.
Silve, C. M., Hradek, G. T., Jones, A. L., and Arnaud, C. D. Parathyroid hormone receptor in intact embryonic chick bone: characterization and cellular localization. 94:379.
Silver, G., and Etlinger, J. D. Regulation of myofibrillar accumulation in chick muscle cultures: evidence for the involvement of calcium and lysosomes in non-uniform turnover of contractile proteins. 101:2383.
Silver, J. *See* Rutishauser, Watanabe, Silver, Troy, and Vimr.
Silver, L. M. *See* Christensen, LeStourgeon, Jamrich, Howard, Serunian, Silver, and Elgin.
Silver, P., Sadler, I., and Osborne, M. A. Yeast proteins that recognize nuclear localization sequences. 109:983.
— *See* Sadler, Chiang, Kurihara, Rothblatt, Way, and Silver.
Silverman, S. J. *See* Cabib, Sburlati, Bowers, and Silverman.
Silvers, S. H. *See* Irwin, Silvers, and Mayne.
Silverstein, S. C. *See* Di Virgilio, Meyer, Greenburg, and Silverstein.
— *See* Furie, Cramer, Naprstek, and Silverstein.
— *See* Lombardi, Montesano, Furie, Silverstein, and Orci.
— *See* McNeil, Swanson, Wright, Silverstein, and Taylor.
— *See* Phaire-Washington, Silverstein, and Wang.
— *See* Phaire-Washington, Wang, and Silverstein.
— *See* Steinberg, Newman, Swanson, and Silverstein.
— *See* Steinberg, Swanson, and Silverstein.
— *See* Sung, Nelson, and Silverstein.
— *See* Swanson, Burke, and Silverstein.
— *See* Swanson, Yirinec, and Silverstein.
— *See* Wang, Michl, Pfeffer, Silverstein, and Tamm.
— *See* Wright, Licht, Craigmyle, and Silverstein.
Sim, P.-S. *See* Stephens, Pöllanen, Tapiovaara, Leung, Sim, Salonen, Rønne,

Behrendt, Danø, and Vaheri.
Simard, G. *See* Kelvin, Simard, Sue-A-Quan, and Connolly.
— *See* Kelvin, Simard, Tai, Yamaguchi, and Connolly.
Simard, R. *See* Laliberté, Dagenais, Filion, Bibor-Hardy, Simard, and Royal.
Siminoski, K., Gonnella, P., Bernanke, J., Owen, L., Neutra, M., and Murphy, R. A. Uptake and transepithelial transport of nerve growth factor in suckling rat ileum. 103:1979.
Simionescu, M., Simionescu, N., and Palade, G. E. Differentiated microdomains on the luminal surface of capillary endothelium. 94:406.
—, **Simionescu, N., and Palade, G. E.** Preferential distribution of anionic sites on the basement membrane and the abluminal aspect of the endothelium in fenestrated capillaries. 95:425.
—, **Simionescu, N., Santoro, F., and Palade, G. E.** Differentiated microdomains of the luminal plasmalemma of murine muscle capillaries: segmental variations in young and old animals. 100:1396.
—, **Simionescu, N., Silbert, J. E., and Palade, G. E.** Differentiated microdomains on the luminal surface of the capillary endothelium. II. Partial characterization of their anionic sites. 90:614.
— *See* Ghinea, Fixman, Alexandru, Popov, Hasu, Ghitescu, Eskenasy, Simionescu, and Simionescu.
— *See* Ghitescu, Fixman, Simionescu, and Simionescu.
— *See* Heltianu, Simionescu, and Simionescu.
— *See* Predescu, Simionescu, Simionescu, and Palade.
— *See* Simionescu, Lupu, and Simionescu.
— *See* Simionescu, Simionescu, and Palade.
— *See* Vasile, Simionescu, and Simionescu.
Simionescu, N., Lupu, F., Simionescu, M. Rings of membrane sterols surround the openings of vesicles and fenestrae, in capillary endothelium. 97:1592.
—, **Simionescu, M., and Palade, G. E.** Differentiated microdomains on the luminal surface of the capillary endothelium. I. Preferential distribution of anionic sites. 90:605.
— *See* Ghinea, Fixman, Alexandru, Popov, Hasu, Ghitescu, Eskenasy, Simionescu, and Simionescu.
— *See* Ghinea and Simionescu.
— *See* Ghitescu, Fixman, Simionescu, and Simionescu.
— *See* Heltianu, Simionescu, and Simionescu.
— *See* Predescu, Simionescu, Simionescu, and Palade.
— *See* Simionescu, Simionescu, and Palade.
— *See* Simionescu, Simionescu, Santoro, and Palade.
— *See* Simionescu, Simionescu, Silbert, and Palade.
— *See* Vasile, Simionescu, and Simionescu.
Simmen, R. C. M., Dunbar, B. S., Guerriero, V., Chafouleas, J. G., Clark, J. H., and Means, A. R. Estrogen stimulates the transient association of calmodulin and myosin light chain kinase with the chicken liver nuclear matrix. 99:588.
Simon, C. *See* Willard and Simon.
— *See* Willard, Simon, Baitinger, Levine, and Skene.
Simon, K., Lingappa, V. R., and Ganem, D. Secreted hepatitis B surface antigen polypeptides are derived from a transmembrane precursor. 107:2163.
—, **Perara, E., and Lingappa, V. R.** Translocation of globin fusion proteins across the endoplasmic reticulum membrane in *Xenopus laevis* oocytes. 104:1165.
Simon, M. I. *See* Draper and Simon.
Simon, P. L. *See* Young, Hazuda, and Simon.
Simon, R. *See* Broughton, Wong, Lewin, Samrey, Myint, Meyer, Dowling, and Simon.
Simon, S. A. *See* Zampighi, Hall, Ehring, and Simon.
— *See* Zampighi, Kreman, Ramón, Moreno, and Simon.
— *See* Zampighi, Simon, Robertson, McIntosh, and Costello.
Simon-Assmann, P., Bouziges, F., Vigny, M., and Kedinger, M. Origin and deposition of basement membrane heparin sulfate proteoglycan in the developing intestine. 109:1837.
Simoni, R. D. *See* Kaplan and Simoni.
Simons, E. R. *See* Borregaard, Heiple, Simons, and Clark.
Simons, J. W., Noga, S. J., Colombani, P. M. Beschorner, W. E., Coffey, D. S., and Hess, A. D. Cyclosporine A, an in vitro calmodulin antagonist, induces nuclear lobulation in human T cell lymphocytes and monocytes. 102:145.
Simons, K. *See* Bacallao, Antony, Dotti, Karsenti, Stelzer, and Simons.
— *See* Bomsel, Prydz, Parton, Gruenberg, and Simons.
— *See* Fuller and Simons.
— *See* Griffiths, Fuller, Back, Hollinshead, Pfeiffer, and Simons.
— *See* Griffiths, Pfeiffer, Simons, and Matlin.
— *See* Gumbiner and Simons.
— *See* Helenius, Kartenbeck, Simons, and Fries.
— *See* Martin, Bainton, Pesonen, Louvard, Genty, and Simons.
— *See* Matlin, Reggio, Helenius, and Simons.
— *See* Matlin and Simons.
— *See* Parton, Prydz, Bomsel, Simons, and Griffiths.
— *See* Pesonen, Bravo, and Simons.
— *See* Pesonen and Simons.
— *See* Pfeiffer, Fuller, and Simons.
— *See* Van Deurs, Sandvig, Petersen, Olsnes, Simons, and Griffiths.
— *See* van Meer and Simons.
— *See* van Meer, Stelzer, Wijnaendts-van-Resandt, and Simons.
Simons, S. *See* Klein, Lubs-Haukeness, and Simons.
Simpson, E. R. *See* Gal, Simpson, Porter, and Snyder.
Simpson, M. *See* Allen, Weiss, Hayden, Brown, Fujiwake, and Simpson.
Simpson, M. V. *See* Mohraz, Simpson, and Smith.
Simpson, P. A., Spudich, J. A., and Parham, P. Monoclonal antibodies prepared against *Dictyostelium* actin: characterization and interactions with actin. 99:287.
— *See* Pardee, Simpson, Stryer, and Spudich.
Simpson, R. J. *See* Burns, Lucas, Krissansen, Werkmeister, Scanlon, Simpson, and Vadas.
Sinard, J. H., and Pollard, T. D. The effect of heavy chain phosphorylation and solution conditions on the assembly of *Acanthamoeba* myosin-II. 109:1529.
—, **Stafford, W. F., and Pollard, T. D.** The mechanism of assembly of *Acanthamoeba* myosin-II minifilaments: minifilaments assembly by three successive dimerization steps. 109:1537.
— *See* Rimm, Sinard, and Pollard.
Sinensky, M. Adaptive alteration in phospholipid composition of plasma membranes from a somatic cell mutant defective in the regulation of cholesterol biosynthesis. 85:166.
— *See* Beck, Hosick, and Sinensky.
Singer, I. I. Association of fibronectin and vinculin with focal contacts and stress fibers in stationary hamster fibroblasts. 92:398.
—, **Kawka, D. W., Kazazis, D. M., and Clark, R. A. F.** In vivo co-distribution of fibronectin and actin fibers in granulation tissue: immunofluorescence and electron microscope studies of the fibronexus at the myofibroblast surface. 98:2091.
—, **Kawka, D. W., Scott, S., Mumford, R. A., and Lark, M. W.** The fibronectin cell attachment sequence arg-gly-asp-ser promotes focal contact formation during only fibroblast attachment and spreading. 104:573.
—, **Scott, S., Kawka, D. W., and Kazazis, D. M.** Adhesomes: specific granules containing receptors for laminin, C3bi/fibrinogen, fibronectin, and vitronectin in human polymorphonuclear leukocytes and monocytes. 109:3169.
—, **Scott, S., Kawka, D. W., Kazazis, D. M., Gailit, J., and Ruoslahti, E.** Cell surface distribution of fibronectin and vitronectin receptors depends on substrate composition and extracellular matrix accumulation. 106:2171.
Singer, M. S. *See* Grabel, Singer, Martin, and Rosen.
Singer, R. A., Bedard, D. P., and Johnston, G. C. Bud formation by the yeast *Saccharomyces cerevisiae* is directly dependent on "start." 98:678.
Singer, R. H., Langevin, G. L., and Lawrence, J. B. Ultrastructural visualization of cytoskeletal mRNAs and their associated proteins using double-label in situ hybridization. 108:2343.
— *See* Kabat-Zinn and Singer.
Singer, S. J. *See* Bergmann and Singer.
— *See* Chen and Singer.
— *See* Fujimoto and Singer.
— *See* Geiger, Dutton, Tokuyasu, and Singer.
— *See* Keller, Scallen, Clarke, Maher, Krisans, and Singer.
— *See* Maher, Cox, and Singer.
— *See* Rogalski, Bergmann, and Singer.
— *See* Rogalski and Singer.
— *See* Takata and Singer.
— *See* Tokuyasu, Dutton, and Singer.
— *See* Tokuyasu, Maher, and Singer.
Singh, J. P., Adams, L. D., and Bonin, P. Mode of fibroblast growth enhancement by human interleukin-1. 106:813.
—, **Chaikin, M. A., Pledger, W. J., Scher, C. D., and Stiles, C. D.** Persistence of the mitogenic response to platelet-derived growth factor (competence) does not reflect a long-term interaction between the growth factor and the target cell. 96:1497.
—, **Chaikin, M. A., and Stiles, C. D.** Phylogenetic analysis of platelet-derived growth factor by radio-receptor assay. 95:667.
Sinicropi, D. V., and McIlwain, D. L. Changes in the amounts of cytoskeletal proteins within the perikarya and axons of regenerating frog motoneurons. 96:240.
Sinnett-Smith, J. W. *See* Mendoza, Schneider, Lopez-Rivas, Sinnett-Smith, and Rozengurt.
— *See* Zachary, Sinnett-Smith, and Rozengurt.

Siri, A. *See* Carnemolla, Balza, Siri, and Zardi.
— *See* Castellani, Siri, Rosellini, Infusini, Borsi, and Zardi.
Sirover, M. A. *See* Gupta and Sirover.
Sistonen, L., Hölttä, E., Lehväslaiho, H., Lehtola, L., and Alitalo, K. Activation of the *neu* tyrosine kinase induces the *fos/jun* transcription factor complex, the glucose transporter, and ornithine decarboxylase. 109:1911.
Siu, C.-H., Cho, A., and Choi, A. H. C. The contact site A glycoprotein directly mediates cell–cell adhesion by homophilic binding in *Dictyostelium discoideum*. 105:2523.
— *See* Choi and Siu.
— *See* Kamboj, Wong, Lamb, and Siu.
Sixma, J. J. *See* de Groot, Reinders, and Sixma.
Sizemore, S. R., and Cole, R. D. Asynchronous appearance of newly synthesized histone H1 subfractions in HeLa chromatin. 90:415.
Sjölund, M., Hedin, U., Sejersen, T., Heldin, C.-H., and Thyberg, J. Arterial smooth muscle cells express platelet-derived growth factor (PDGF) A chain mRNA, secrete a PDGF-like mitogen, and bind exogenous PDGF in a phenotype- and growth state-dependent manner. 106:403.
Skalli, O., Ropraz, P., Trzeciak, A., Benzonana, G., Gillessen, D., and Gabbiani, G. A monoclonal antibody against α-smooth muscle actin: a new probe for smooth muscle differentiation. 103:2787.
Skaper, S. D. *See* Facci, Skaper, Favaron, and Leon.
Skene, J. H. P., and Virág, I. Posttranstational membrane attachment and dynamic fatty acylation of a neuronal growth cone protein, GAP-43. 108:613.
—, **and Willard, M.** Axonally transported proteins associated with axon growth in rabbit central and peripheral nervous systems. 89:96.
—, **and Willard, M.** Changes in axonally transported proteins during axon regeneration in toad retinal ganglion cells. 89:86.
Skene, P. *See* Willard, Simon, Baitinger, Levine, and Skene.
Skibbens, J. E., Roth, M. G., and Matlin, K. S. Differential extractability of influenza virus hemagglutinin during intracellular transport in polarized epithelial cells and nonpolar fibroblasts. 108:821.
Skinner, M. K., Tung, P. S., and Fritz, I. B. Cooperativity between Sertoli cells and testicular peritubular cells in the production and deposition of extracellular matrix components. 100:1941.
Skipper, B. E. *See* McGuffee, Hurwitz, Little, and Skipper.
Sklar, L. A., Omann, G. M., and Painter, R. G. Relationship of actin polymerization and depolymerization to light scattering in human neutrophils: dependence on receptor occupancy and intracellular Ca^{++}. 101:1161.
— *See* Jesaitis, Naemura, Sklar, Cochrane, and Painter.
— *See* Norgauer, Just, Aktories, and Sklar.
— *See* Omann and Sklar.
Skoff, R. P. *See* Hatfield, Skoff, Maisel, and Eng.
Skosey, J. L., Chow, D. C., Nusinow, S., May, J., Gestautas, V., and Niwa, Y. Effect of oxygen tension on human peripheral blood leukocytes: Lysosomal enzyme release and metabolic responses during phagocytosis. 88:358.
Skriver, E., Maunsbach, A. B., and Jorgensen, P. L. Ultrastructure of Na,K-transport vesicles reconstituted with purfied renal Na,K-ATPase. 86:746.
Skriver, L., Larsson, L.-I., Kielberg, V., Nielsen, L. S., Andreson, P. B., Kristensen, P., and Danø, K. Immunocytochemical localization of urokinase-type plasminogen activator in Lewis lung carcinoma. 99:753.
— *See* Larsson, Skriver, Nielsen, Hansen, Kristensen, and Danø.
Skubitz, A. P. N. *See* Charonis, Skubitz, Koliakos, Reger, Dege, Vogel, Wohlueter, and Furcht.
Skudlarek, M. D. *See* Tulsiani, Skudarek, and Orgebin-Crist.
Skulachev, V. P. *See* Amchenkova, Bakeeva, Chetsov, Skulachev, and Zorov.
— *See* Severina, Skulachev, and Zorov.
Skutelsky, E., and Bayer, E. A. Cell-type-related seggregation of surface galactosyl-containing components at an early developmental stage in hemopoietic bone marrow cells in the rabbit. 96:184.
Slater, C. R. *See* McMahan, Slater, and Marshall.
Slater, E. *See* Goodman, Slater, and Herschman.
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Slayter, H. S. *See* Hoffman, Watkins, Slayter, and Kunkel.
Sleeman, A. M. *See* Sheehan, Mills, Sleeman, Laskey, and Blow.
Sleight, R. G., and Pagano, R. E. Transport of a fluorescent phosphatidylcholine analog from the plasma membrane to the Golgi apparatus. 99:743.
Sloat, B. F., Adams, A., and Pringle, J. R. Roles of the *CDC24* gene product in cellular morphogenesis during the *Saccharomyces cerevisiae* cell cycle. 89:395.
Sloboda, R. D., and Dickersin, K. Structure and composition of the cytoskeleton of nucleated erythrocytes. I. The presence of microtubule-associated protein 2 in the marginal band. 87:170.
— *See* Gilbert and Sloboda.
— *See* Wadsworth and Sloboda.
Slonczewski, J. L., Wilde, M. W., and Zigmond, S. H. Phosphorylase a activity as an indicator of neutrophil activation by chemotactic peptide. 101:1191.
Slot, J. W., and Geuze, H. J. Sizing of protein A-colloidal gold probes for immunoelectron microscopy. 90:533.
— *See* Blok, Gibbs, Lienhard, Slot, and Geuze.
— *See* Chang, Slot, Geuze, and Crapo.
— *See* Geuze, Slot, and Schwartz.
— *See* Geuze, Slot, Strous, Hasilik, and von Figura.
— *See* Geuze, Slot, Strous, Lodish, and Schwartz.
— *See* Geuze, Slot, van der Ley, and Scheffer.
— *See* Geuze, Stoorvogel, Strous, Slot, Zijderhand-Bleekemolen, and Mellman.
— *See* Strous, Du Maine, Zijderhand-Bleekemolen, Slot, and Schwartz.
— *See* Strous, Willemsen, van Kerkhof, Slot, Geuze, and Lodish.
— *See* Zijderhand-Bleekemolen, Schwartz, Slot, Strous, and Geuze.
Sluder, G., and Begg, D. A. Control mechanisms of the cell cycle: role of the spatial arrangement of spindle components in the timing of mitotic events. 97:877.
—, **Miller, F. J., and Rieder, C. L.** The reproduction of centrosomes: nuclear versus cytoplasmic controls. 103:1873.
—, **and Rieder, C. L.** Centriole number and the reproductive capacity of spindle poles. 100:887.
—, **and Rieder, C. L.** Experimental separation of pronuclei in fertilized sea urchin eggs: chromosomes do not organize a spindle in the absence of centrosomes. 100:897.
Sluse, F. *See* Matagne, Michel-Wolvertz, Munaut, Duyckaerts, and Sluse.
Sly, W. S. *See* Fischer, Natowicz, Sly, and Bretthauer.
— *See* Gonzalez-Noriega, Grubb, Talkad, and Sly.
— *See* Merion and Sly.
Smaill, B. H. *See* Jensen and Smaill.
Small, G. M., and Lazarow, P. B. Import of the carboxy-terminal portion of acyl-CoA oxidase into perosisomes of *Candida tropicalis*. 105:247.
— *See* Imanaka, Small, and Lazarow.
Small, J. V. Organization of actin in the leading edge of cultured cells: Influence of osmium tetroxide and dehydration on the ultrastructure of actin meshworks. 91:695.
—, **Furst, D. O., and De Mey, J.** Localization of filamin in smooth muscle. 102:210.
— *See* Avnur, Small, and Geiger.
— *See* Foisner, Leichtfried, Herrmann, Small, Lawson, and Wiche.
— *See* Langanger, De May, Moeremans, Daneels, De Brabander, and Small.
— *See* Rinnerthaler, Geiger, and Small.
Small, R. K., Blank, M., Ghez, R., and Pfenninger, K. H. Components of the plasma membrane of growing axons. II. Diffusion of membrane protein complexes. 98:1434.
—, **and Pfenninger, K. H.** Components of the plasma membrane of growing axons. I. Size and distribution of intra-membrane particles. 98:1422.
— *See* Strichartz, Small, and Pfenninger.
Small, S. J., Shull, G. E., Santoni, M.-J., and Akeson, R. Identification of a cDNA clone which contains the complete coding sequence for a 140-kD rat NCAM polypeptide. 105:2335.
Smirnov, V. N. *See* Shirinsky, Antonov, Birukov, Sobolevsky, Romanov, Kabaeva, Antonova, and Smirnov.
Smit, J. Localizing the subunit pool for the temporally regulated polar pili of *caulobacter crescentus*. 105:1821.
—, **and Agabian, N.** Cell surface patterning and morphogenesis: biogenesis of a periodic surface array during *Caulobacter* development. 95:41.
Smith, A. *See* Florkiewicz, Smith, Bergmann, and Rose.
Smith, A. M. *See* Bhorjee, Barclay, Wedrychowski, and Smith.
Smith, B. *See* Burnside, Smith, Nagata, and Porrello.
Smith, C. G. *See* Couchman, Rees, Green, and Smith.
— *See* Woods, Höök, Kjellén, Smith, and Rees.
Smith, C. W. J. *See* Taubman, Smith, Izumo, Grant, Endo, Andreadis, and Nadal-Ginard.
Smith, D. E., and Fisher, P. A. Correction. 100:337.
—, **and Fisher, P. A.** Identification, developmental regulation, and response to heat shock of two antigenetically related forms of a major nuclear envelope protein in *Drosophila* embryos: application of an improved method for affinity purification of antibodies using polypeptides immobilized on nitrocellulose blots. 99:20.
—, **and Fisher, P. A.** Interconversion of *Drosophila* nuclear lamin isoforms during oogenesis, early embryogenesis, and upon entry of cultured cells into mitosis. 108:255.

—, **Gruenbaum, Y., Berrios, M., and Fisher, P. A.** Biosynthesis and interconversion of *Drosophila* nuclear lamin isoforms during normal growth an in response to heat shock. 105:771.
— *See* Gruenbaum, Landesman, Drees, Bare, Saumweber, Paddy, Sedat, Smith, Benton, and Fisher.
— *See* McConnell, Whalen, Smith, and Fisher.
Smith, D. M. *See* Wakefield, Smith, Masui, Harris, and Sporn.
Smith, G. A. *See* Beaven, Guthrie, Moore, Smith, Hesketh, and Metcalfe.
Smith, H. C., Puvion, E., Buchholtz, L. A., and Berezney, R. Spatial distribution of DNA loop attachment and replicational sites in the nuclear matrix. 99:1794.
—, **Spector, D. L., Woodcock, C. L. F., Ochs, R. L., and Bhorjee, J.** Alterations in chromatin conformation are accompanied by reorganization of nonchromatin domains that contain U-snRNP protein p28 and nuclear protein p107. 101:560.
Smith, J. M. *See* Thompson, Flanders, Smith, Ellingsworth, Roberts, and Sporn.
Smith, K. *See* Steinberg, Smith, Colozzo, and Pollack.
Smith, K. E. *See* Angelides, Smith, and Takeda.
Smith, L., and Hochmuth, R. M. Effect of wheat germ agglutinin on the viscoelastic properties of erythrocyte membrane. 94:7.
— *See* Knudsen, Smith, and McElwee.
— *See* Warn, Smith, and Warn.
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— *See* Plant, Benson, and Smith.
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— *See* Wasserman and Smith.
Smith, L. M. *See* Hafeman, Smith, Fearon, and McConnell.
— *See* Kellems, Harper, and Smith.
Smith, M. A. *See* Nitkin, Smith, Magill, Fallon, Yao, Wallace, and McMahan.
Smith, M. L. *See* Rao and Smith.
Smith, M. M., and Stirling, V. B. Histone H3 and H4 gene deletions in *Saccharomyces cerevisiae*. 106:557.
Smith, P. R. *See* Aebi, Fowler, Isenberg, Pollard, and Smith.
— *See* Mohraz, Simpson, and Smith.
— *See* Mohraz and Smith.
Smith, R. G., McManaman, J., and Appel, S. H. Trophic effects of skeletal muscle extracts on ventral spinal cord neurons in vitro: separation of a protein with morphologic activity from proteins with cholinergic activity. 101:1608.
Smith, R. M., and Jarett, L. Surface structure changes of rat adipocytes during lipolysis stimulated by various lipolytic agents. A scanning electron microscopic study. 84:57.
Smith, S. *See* Capetanaki, Smith, and Heath.
Smith, S. J. *See* Forscher and Smith.
Smith, Z. D. J., D'Eugenio-Gumkowski, F., Yanagisawa, K., and Jamieson, J. D. Endogenous and monoclonal antibodies to the rat pancreatic acinar cell Golgi complex. 98:2035.
Smythe, E., Pypaert, M., Lucocq, J., and Warren, G. Formation of coated vesicles from coated pits in broken A431 cells. 108:843.
Snaar-Jagalska, B. E. *See* Kesbeke, Snaar-Jagalska, and Van Haastert.
Snabes, M. C., Boyd, A. E., and Bryan, J. Detection of actin-binding proteins in human platelets by ^{125}I-actin overlay of polyacrylamide gels. 90:809.
Snavely, M. D. *See* Meier, Snavely, Brown, Brown, and Insel.
Snell, W. J., Buchanan, M., and Clausell, A. Lidocaine reversibly inhibits fertilization in *Chlamydomonas*: a possible role for calcium in sexual signaling. 94:607.
—, **Clausell, A., and Moore, W. S.** Flagellar adhesion in *Chlamydomonas* induces synthesis of two high molecular weight cell surface proteins. 96:589.
—, **Eskue, W. A., and Buchanan, M. J.** Regulated secretion of a serine protease that activates an extracellular matrix-degrading metalloprotease during fertilization in *Chlamydomonas*. 109:1689.
—, **Kosfiszer, M. G., Clausell, A., Perillo, N., Imam, S., and Hunnicutt, G.** A monoclonal antibody that blocks adhesion of *Chlamydomonas* mt^+ gametes. 103:2449.
—, **and Moore, W. S.** Aggregation-dependent turnover of flagellar adhesion molecules in *Chlamydomonas* gametes. 84:203.
— *See* Brown, Shannon, and Snell.
— *See* Buchanan, Imam, Eskue, and Snell.
— *See* Imam, Buchanan, Shin, and Snell.
— *See* Imam and Snell.
Snider, M. D., and Rogers, O. C. Intracellular movement of cell surface receptors after endocytosis: resialylation of asialo-transferrin receptor in human erythroleukemia cells. 100:826.
—, **and Rogers, O. C.** Membrane traffic in animal cells: cellular glycoproteins return to the site of Golgi mannosidase I. 103:265.
— *See* Brands, Snider, Hino, Park, Gelboin, and Rothman.
— *See* Tufaro, Snider, and McKnight.
Snow, C. M., Senior, A., and Gerace, L. Monoclonal antibodies identify a group of nuclear pore complex glycoproteins. 104:1143.
— *See* Holt, Snow, Senior, Haltiwanger, Gerace, and Hart.
Snyder, J. M. *See* Gal, Simpson, Porter, and Snyder.
Snyder, M. The *SPA2* protein of yeast localizes to sites of cell growth. 108:1419.
Snyderman, R., Pike, M. C., Edge, S., and Lane, B. A chemoattractant receptor on macrophages exists in two affinity states regulated by guanine nucleotides. 98:444.
— *See* Pike and Snyderman.
Sobel, A. *See* Cartaud, Sobel, Rousselet, Devaux, and Changeux.
Sobel, J. S. Myosin rings and spreading in mouse blastomeres. 99:1145.
—, **and Alliegro, M. A.** Changes in the distribution of a spectrin-like protein during development of the preimplantation mouse embryo. 100:333.
Sobieszek, A. *See* Langanger, Moeremans, Daneels, Sobieszek, De Brabander, and De Mey.
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Sobolevsky, A. B. *See* Shirinsky, Antonov, Birukov, Sobolevsky, Romanov, Kabaeva, Antonova, and Smirnov.
Sobue, K. *See* Hirokawa, Sobue, Kanda, Harada, and Yorifuji.
— *See* Tsukita, Tsukita, Ishikawa, Kurokawa, Morimoto, Sobue, and Kakiuchi.
Sodeck, J. *See* Aubin, Heersche, Merrilees, and Sodeck.
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Sofia, C. A. *See* Markelonis, Oh, Park, Cha, Sofia, Kim, and Azari.
Sohal, G. S., and Boydston, W. R. Influence of neostigmine treatment of embryonic development of acetylcholine receptors and neuromuscular junctions. 94:540.
Soifer, D. *See* Czosnek, Soifer, and Wisniewski.
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— *See* Rossomando, Jahngen, Varnum, and Soll.
— *See* Varnum, Edwards, and Soll.
— *See* Varnum and Soll.
— *See* Wessels, Schroeder, Voss, Hall, Condeelis, and Soll.
Solomon, F. Specification of cell morphology by endogenous determinants. 90:547.
—, **and Magendantz, M.** Cytochalasin separates microtubule disassembly from loss of asymmetric morphology. 89:157.
— *See* Birgbauer and Solomon.
— *See* Goslin, Birgbauer, Banker, and Solomon.
— *See* Kim, Magendantz, Katz, and Solomon.
— *See* Swan and Solomon.
Solomon, L. R. *See* Minoo, Sullivan, Solomon, Martin, Toft, and Scott.
Solowska, J., Guan, J.-L., Marcantonio, E. E., Trevithick, J. E., Buck, C. A., and Hynes, R. O. Correction. 109:1887.
—, **Guan, J.-L., Marcantonio, E. E., Trevithick, J. E., Buck, C. A., and Hynes, R. O.** Expression of normal and mutant avian integrin subunits in rodent cells. 109:853.
Soltesz, R. *See* Pacifici, Soltesz, Thal, Shanley, Boettiger, and Holtzer.
Soltys, B. J., and Borisy, G. G. Polymerization of tubulin in vivo: direct evidence for assembly onto microtubule ends and from centrosomes. 100:1682.
Solursh, M. *See* Zanetti and Solursh.
Somerville, S. C. *See* Darr, Somerville, and Arntzen.
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— *See* Chiesi, Ho, Inesi, Somlyo, and Somlyo.
— *See* Somlyo, Gonzalez-Serratos, Shuman, McClellan, and Somlyo.
— *See* Yoshioka and Somlyo.
Somlyo, A. V., Gonzelez-Serratos, H., Schuman, H., McClellan, G., and Somlyo, A. P. Calcium release and ionic changes in the sarcoplasmic reticulum of tetanized muscle: An electron-probe study. 90:577.
— *See* Berner, Somlyo, and Somlyo.
— *See* Bond and Somlyo.
— *See* Chiesi, Ho, Inesi, Somlyo, and Somlyo.
— *See* McGraw, Somlyo, and Blaustein.
Sommer, A. *See* Saksela, Moscatelli, Sommer, and Rifkin.
Sommer, I., Lagenaur, C., and Schachner, M. Recognition of Bergmann glial and ependymal cells in the mouse nervous system by monoclonal antibody. 90:448.
Sommerville, J. *See* Cummings, and Sommerville.
Sonderegger, P., Fishman, M. C., Bokoum, M., Bauer, H. C., Neale, E. A., and Nelson, P. G. A few axonal proteins distinguish ventral spinal cord neurons from dorsal root ganglion neurons. 98:364.
— *See* Ruegg, Stoeckli, Lanz, Streit, and Sonderegger.

Sonenberg, N. *See* Bonneau, Darveau, and Sonenberg.
Song, B. *See* Heidemann, Hamborg, Thomas, Song, Lindley, and Chu.
Sonoda, S. *See* Velazquez, Sonoda, Bugaisky, and Lindquist.
Soranno, T., and Bell, E. Cytostructural dynamics of spreading and translocating cells. 95:127.
Sorbara, L. *See* Horwitz, Chia, Harracksingh, Orlow, Pifko-Hirst, Schneck, Sorbara, Speaker, and Wilk.
Sordat, B. *See* Cajot, Schleuning, Medcalf, Bamat, Testuz, Liebermann, and Sordat.
Sorensen, R. A., Cyert, M. S., and Pedersen, R. A. Active maturation-promoting factor is present in mature mouse oocytes. 100:1637.
Sorgente, N. *See* Laug, Tokes, Benedict, and Sorgente.
Sorger, P. K., Crowther, R. A., Finch, J. T., and Pearse, B. M. F. Clathrin cubes: an extreme variant of the normal cage. 103:1213.
Soria, C. *See* Festoff, Hantaï, Soria, Thomaïdis, and Soria.
Soria, J. *See* Festoff, Hantaï, Soria, Thomaïdis, and Soria.
Sossin, W. *See* Kreiner, Sossin, and Scheller.
Sotoh, K., Iwane, M., Matsuzaki, F., Kikuchi, M., and Ikai, A. Isolation and characterization of a high molecular weight actin-binding protein from *Physarum polycephalum* plasmodia. 98:1611.
Soucy, L. J. *See* Vogl and Soucy.
Soudry, E. *See* Harrison, Soudry, and Sager.
Southwick, F. S., Dabiri, G. A., Paschetto, M., and Zigmond, S. H. Polymorphonuclear leukocyte adherence induces actin polymerization by a transduction pathway which differs from that used by chemoattractants. 109:1561.
— *See* Spiegel, Beardsley, Southwick, and Lux.
Souto-Padron, T. *See* Bonaldo, Souto-Padron, de Souza, and Goldenberg.
Sowers, A. E. A long-lived fusogenic state is induced in erythrocyte ghosts by electric pulses. 102:1358.
— Characterization of electric field-induced fusion in erythrocyte ghost membranes. 99:1989.
Sowinski, J. M. *See* Chilton, Nicosia, Sowinski, and Wolf.
Soyez, S. *See* Tranqui, Andrieux, Hudry-Clergeon, Ryckewaert, Soyez, Chapel, Ginsburg, Plow, and Marguerie.
Spangler, M. M. *See* Matzuk, Spangler, Camel, Suganuma, and Boime.
Spanton, S. *See* Salpeter, Spanton, Holley, and Podleski.
Spaziani, E. *See* Hornick, Hamilton, Spaziani, Enders, and Havel.
Speaker, M. *See* Horwitz, Chia, Harracksingh, Orlow, Pifko-Hirst, Schneck, Sorbara, Speaker, and Wilk.
Spear, P. G. *See* Martin, Barghusen, Leser, and Spear.
Spearman, T. N., Hurley, K. P., Olivas, R., Ulrich, R. G., and Butcher, F. R. Subcellular location of stimulas-affected endogenous phosphoproteins in the rat parotid gland. 99:1354.
Specian, R. D., and Neutra, M. R. Mechanism of rapid mucus secretion in goblet cells stimulated by acetylcholine. 85:626.
Spector, D. L. *See* Bennett, Spector, and Yeoman.
— *See* Smith, Spector, Woodcock, Ochs, and Bhorjee.
Spencer, C. S. *See* Schwarzbauer, Spencer, and Wilson.
Spencer, D. *See* Chrispeels, Higgins, Craig, and Spencer.
— *See* Chrispeels, Higgins, and Spencer.
Spencer, D. F. *See* LeBlanc, Földvári, Spencer, Breckenridge, Fenwick, Williams, and Mezei.
Spengler, B. A. *See* Meyers, Spengler, Chang, Melera, and Biedler.
Sperling, L., Tardieu, A., and Gulik-Krzywicki, T. The cyrstal lattice of *Paramecium* tricholcysts before and after exocytosis by x-ray diffraction and freeze-fracture electron microscopy. 105:1649.
Speth, V. *See* Gobel, Speth, and Bredt.
Spiegel, E., Burger, M., and Spiegel, M. Fibronectin in the developing sea urchin embryo. 87:309.
Spiegel, J. E., Beardsley, D. S., Southwick, F. S., and Lux, S. E. An analogue of the erythroid membrane skeletal protein 4.1 in nonerythroid cells. 99:886.
Spiegel, M. *See* Spiegel, Burger, and Spiegel.
Spiegel, S., Kassis, S., Wilchek, M., and Fishman, P. H. Direct visualization of redistribution and capping of fluorescent gangliosides on lymphocytes. 99:1575.
—, **Schlessinger, J., and Fishman, P. H.** Incorporation of fluorescent gangliosides into human fibroblasts: mobility, fate, and interaction with fibronectin. 99:699.
—, **Yamada, K. M., Hom, B. E., Moss, J., and Fishman, P. H.** Fibrillar organization of fibronectin is expressed coordinately with cell surface gangliosides in a variant murine fibroblast. 102:1898.
—, **Yamada, K. M., Hom, B. E., Moss, J., and Fishman, P. H.** Fluorescent gangliosides as probes for the retention and organization of fibronectin by ganglioside-deficient mouse cells. 100:721.
— *See* Dixon, Stewart, Grinstein, and Spiegel.
— *See* Feuerstein, Spiegel, and Mond.
Spiegelman, B. M., Distel, R. J., Ro, H. S., Rosen, B., and Satterberg, B. *fos* protooncogene and the regulation of gene expression in adipocyte differentiation. 107:829.
— *See* Cook, Hunt, and Spiegelman.
Spiele, H. *See* Roos, Spiele, Feltkamp, Huisman, Wiegant, Traas, and Mesland.
Spiess, E. *See* Pesheva, Spiess, and Schachner.
Spiess, J. *See* Noe, Andrews, Dixon, and Spiess.
— *See* Noe, Debo, and Spiess.
Spindle, A. *See* Glass, Aggeler, Spindle, Pedersen, and Werb.
Spitsberg, V. *See* Horovitz, Spitsberg, and Salpeter.
Spitzer, R. H., Downing, T. W., Koch, E. A., Salo, W. L., and Saidel, L. J. Hagfish slime gland thread cells. II. Isolation and characterization of intermediate filament components associated with the thread. 98:670.
— *See* Downing, Spitzer, Koch, and Salo.
Spitznagel, E. L. *See* Johnson, Ross, Meyers, Spitznagel, and Bunge.
Spizz, G. *See* Olson, Sternberg, Hu, Spizz, and Wilcox.
Spooncer, E., Gallagher, J. T., Krizsa, F., and Dexter, T. M. Regulation of haemopoiesis in long-term bone marrow cultures. IV. Glycosaminoglycan synthesis and the stimulation of haemopoiesis by β-D-xylosides. 96:510.
Spooner, B. S. *See* Thompson and Spooner.
Sporn, L. A., Marder, V. J., and Wagner, D. D. Differing polarity of the constitutive and regulated secretory pathways for von Willebrand factor in endothelial cells. 108:1283.
Sporn, M. B., Roberts, A. B., Wakefield, L. M., and de Crombrugghe, B. Some recent advances in the chemistry and biology of transforming growth factor-beta. 105:1039.
— *See* Assoian and Sporn.
— *See* Flanders, Thompson, Cissel, Van Obberghen-Schilling, Baker, Kass, Ellingsworth, Roberts, and Sporn.
— *See* Gehron, Young, Flanders, Roche, Kondaiah, Reddi, Termine, Sporn, and Roberts.
— *See* Heine, Munoz, Flanders, Ellingsworth, Lam, Thompson, Roberts, and Sporn.
— *See* Thompson, Flanders, Smith, Ellingsworth, Roberts, and Sporn.
— *See* Wakefield, Smith, Masui, Harris, and Sporn.
Sprague, S. G., Camm, E. L., Green, B. R., and Staehelin, L. A. Reconstitution of light-harvesting complexes and photosystem II cores into galactolipid and phospholipid liposomes. 100:552.
Spray, D. C., Fujita, M., Saez, J. C., Choi, H., Watanabe, T., Hertzberg, E., Rosenberg, L. C., and Reid, L. M. Proteoglycans and glycosaminoglycans induce gap junction synthesis and function in primary liver cultures. 105:541.
—, **Ginzberg, R. D., Morales, E. A., Gatmaitan, Z., and Arias, I. M.** Electrophysiological properties of gap junctions between dissociated pairs of rat hepatocytes. 103:135.
—, **Nerbonne, J., Campos de Carvalho, A., Harris, A. L., and Bennett, M. V. L.** Substituted benzyl acetates: a new class of compounds that reduce gap junctional conductance by cytoplasmic acidification. 99:174.
— *See* Pepper, Spray, Chanson, Montesano, Orci, and Meda.
Spring, H. *See* Franke, Kleinschmidt, Spring, Krohne, Grund, Trendelenburg, Stoehr, and Scheer.
Springer, T. *See* Larson, Corbi, Berman, and Springer.
Springer, T. A. *See* Dustin and Springer.
Springer, W. R., and Barondes, S. H. Cell adhesion molecules: Detection with univalent second antibody. 87:703.
—, **Haywood, P. L., and Barondes, S. H.** Endogenous cell surface lectin in *Dictyostelium*: Quantitation, elution by sugar, and elicitation by divalent immunoglobulin. 87:682.
Spudich, E. N., and Spudich, J. L. Photosensitive phosphoproteins in halobacteria: Regulatory coupling of transmembrane proton flux and protein dephosphorylation. 91:895.
Spudich, J. *See* Griffith, Downs, and Spudich.
Spudich, J. A. *See* Brown and Spudich.
— *See* Brown, Yamamoto, and Spudich.
— *See* De Lozanne, Berlot, Leinwand, and Spudich.
— *See* Flicker, Peltz, Sheetz, Parham, and Spudich.
— *See* Giffard, Weeds, and Spudich.
— *See* Griffith, Downs, and Spudich.
— *See* Pardee, Simpson, Stryer, and Spudich.
— *See* Pardee and Spudich.
— *See* Pasternak, Flicker, Ravid, and Spudich.
— *See* Peltz, Kuczmarski, and Spudich.
— *See* Peltz, Spudich, and Parham.
— *See* Sellers, Spudich, and Sheetz.
— *See* Sheetz, Chasan, and Spudich.
— *See* Simpson, Spudich, and Parham.
— *See* Taylor, Reidler, Spudich, and Stryer.
— *See* Wang and Spudich.
— *See* Yamamoto, Pardee, Reidler, Stryer, and Spudich.

Spudich, J. L., and Sager, R. Regulation of the *Chlamydomonas* cell cycle by light and dark. 85:136.
— *See* Spudich and Spudich.
Spurck, T. P., and Pickett-Heaps, J. D. On the mechanism of anaphase A: evidence that ATP is needed for microtubule disassembly and not generation of polewards force. 105:1691.
Spurr, S. J. *See* Gipson, Grill, Spurr, and Brennan.
Spycher, M. A. *See* Bruckner, Hörler, Mendler, Houze, Winterhalter, Eich-Bender, and Spycher.
Squinto, S. P. *See* Kuettel, Squinto, Kwast-Welfeld, Schwoch, Schweppe, and Jungmann.
Squire, J. *See* Cantino and Squire.
Sramek, S. *See* Via, Sramek, Larriba, and Steiner.
Srimal, S. *See* Nathan, Srimal, Farber, Sanchez, Kabbash, Asch, Gailit, and Wright.
Srinivas, R. V. *See* Wills, Srinivas, and Hunter.
Srivastva, A. *See* White, Allis, Goldfarb, Srivastva, Weir, and Gorovsky.
Staatz, W. D., Rajpara, S. M., Wayner, E. A., Carter, W. G., and Santoro, S. A. The membrane glycoprotein Ia–IIa (VLA-2) complex mediates the Mg^{++}-dependent adhesion of platelets to collagen. 108:1917.
Stack, J. H. *See* Cox, Stack, and Lazarides.
Stadler, J. Absence of sugars in electrophoretically purified cytochrome b_5 demonstrated by combined gas chromatography-mass spectrometry. 89:615.
— *See* Schmid, Schiller, Grund, Stadler, and Franke.
Staecker, J. L. *See* Winningham-Major, Staecker, Barger, Coats, and Van Eldik.
Staehelin, L. A., and Arntzen, C. J. Regulation of chloroplast membrane function: protein phosphorylation changes spatial organization of membrane components. 97:1327.
— *See* Allen, Duysen, and Staehelin.
— *See* Allen and Staehelin.
— *See* Giddings, Brower, and Staehelin.
— *See* Giddings and Staehelin.
— *See* McDonnel and Staehelin.
— *See* Mörschel and Staehelin.
— *See* Schuster, Dewit, Staehelin, and Ohad.
— *See* Seibert, DeWit, and Staehelin.
— *See* Sprague, Camm, Green, and Staehelin.
— *See* Stafstrom and Staehelin.
Staehelin, M. *See* Hertel and Staehelin.
Stafford, W. F. *See* Sinard, Stafford, and Pollard.
Stafstrom, J. P., and Staehelin, L. A. Are annulte lamellae in the *Drosphilia* embryo the result of overproduction of nuclear pore components? 98:699.
Stagni, N. *See* de Bernard, Bianco, Bonucci, Costantini, Lunazzi, Martinuzzi, Modricky, Moro, Panfili, Pollesello, Stagni, and Vittur.
Stahl, P., and Gordon, S. Expression of mannosyl-focosyl receptor for endocytosis on cultured primary macrophages and their hybrids. 93:49.
— *See* Harding, Heuser, and Stahl.
— *See* Tietze, Schlesinger, and Stahl.
Stallcup, K. C., Burakoff, S. J., and Mescher, M. F. Growth inhibitory activity of lymphoid cell plasma membranes. II Partial characterization of the inhibitor. 99:1227.
—, **Dawson, A., and Mescher, M. F.** Growth inhibitory activity of lymphoid cell plasma membranes. I. Inhibition of lymphocyte and lymphoid tumor cell growth. 99:1221.
Stamatoglou, S. C., Hughes, R. C., and Lindahl, U. Rat hepatocytes in serum-free primary culture elaborate an extensive extracellular matrix containing fibrin and fibronectin. 105:2417.
—, **and Keller, J. M.** Correlation between cell substrate attachment in vitro and cell surface heparan sulfate affinity for fibronectin and collagen. 96:1820.
Stanchfield, J. E., and Yager, J. D., Jr. Primary induction of vitellogenin synthesis in monolayer cultures of amphibian hepatocytes. 84:468.
Standart, N., Hunt, T., and Ruderman, J. V. Differential accumulation of ribonucleotide reductase subunits in clam oocytes: the large subunit is stored as a polypeptide, the small subunit as untranslated mRNA. 103:2129.
Standart, N. M., Bray, S. J., George, E. L., Hunt, T., and Ruderman, J. V. The small subunit of ribonucleotide reductase is encoded by one of the most abundant translationally regulated maternal mRNAs in clam and sea urchin eggs. 100:1968.
Stanley, E. R. *See* Byrne, Guilbert, and Stanley.
— *See* Guilbert and Stanley.
Stanley, J. R., and Yuspa, S. H. Specific epidermal protein markers are modulated during calcium-induced terminal differentiation. 96:1809.
Stanley, K. *See* Andres, Stanley, Cheifetz, and Massagué.
Stanley, P., Sudo, T., and Carver, J. P. Differential involvement of cell surface sialic acid residues in wheat germ agglutinin binding to parental and wheat germ agglutinin-resistant Chinese hamster ovary cells. 85:60.
— *See* Chaney, Sundaram, Friedman, and Stanley.
Stanners, C. P. *See* Chamberlain, Pollard, and Stanners.
Stanton, R. P. *See* Kane, Stanton, Raymond, Dobson, Knafelc, and Farber.
Stapel, S. O. *See* Wistow, Lietman, Williams, Stapel, de Jong, Horwitz, and Piatigorsky.
Starcher, B. *See* Mecham, Lange, Madaras, and Starcher.
Staufenbiel, M., and Deppert, W. Preparation of nuclear matrices from cultured cells: sufractionation of nuclei in situ. 98:1886.
—, **and Lazarides, E.** Assembly of protein 4.1 during chicken erythroid differentiation. 102:1157.
Stearns, M. E. High voltage electron microscopy studies of axoplasmic transport in neurons: a possible regulatory role for divalent cations. 92:765.
—, **and Ochs, R. L.** A functional in vitro model for studies of intracellular motility in digitonin permeabilized erythrophores. 94:727.
—, **Wang, M., Tew, K. D., and Binder, L. I.** Estramustine binds a MAP-1-like protein to inhibit microtubule assembly in vitro and disrupt microtubule organization in DU 145 cells. 107:2649.
Stebbings, H. *See* Mogensen, Tucker, and Stebbings.
Steck, P. A., Blenis, J., Voss, P. G., and Wang, J. L. Growth control in cultured 3T3 fibroblasts. II. Molecular properties of a fraction enriched in growth inhibitory activity. 92:523.
Steck, T. L. *See* Dinauer, Steck, and Devreotes.
— *See* Lange, Hadesman, and Steck.
— *See* Padh, Lavasa, and Steck.
— *See* Shen, Josephs, and Steck.
Steel, V. L. *See* Dennerll, Joshi, Steel, Buxbaum, and Heidemann.
Steer, C. J., Bisher, M., Blumenthal, R., and Steven, A. C. Detection membrane of cholesterol by filipin in isolated rat liver coated vesicles is dependent upon removal of the clathrin coat. 99:315.
— *See* Heuser and Steer.
— *See* Steven, Hainfield, Wall, and Steer.
Steere, R. L., Erbe, E. F., and Moseley, J. M. Prefracture and cold-fracture images of yeast plasma membranes. 86:113.
Stefansson, K. *See* Marton and Stefansson.
— *See* Mikol and Stefansson.
Steffen, P. K. *See* Fox, Boyles, Berndt, Steffen, and Anderson.
Steffen, W., Fuge, H., Dietz, R., Bastmeyer, M., and Müller, G. Aster-free spindle poles in insect spermatocytes: evidence for chromosome-induced spindle formation? 102:1679.
Steger, H. F. *See* Pfaller, Steger, Rassow, Pfanner, and Neupert.
Steimer, K. S., and Klagsbrun, M. Serum-free growth of normal and transformed fibroblasts in milk: Differential requirements for fibronectin. 88:294.
Stein, J. P. *See* Catterall, Stein, Kristo, Means, and O'Malley.
Steinberg, B. M., Smith, K., Colozzo, M., and Pollack, R. Establishment and transformation diminish the ability of fibroblasts to contract a native collagen gel. 87:304.
Steinberg, M. S. *See* Gorbsky and Steinberg.
Steinberg, R. A. Cyclic AMP-dependent phosphorylation of the precursor to β subunit of mitochondrial F_1-ATPase: a physiological mistake? 98:2174.
— Sites of phosphorylation and mutation in regulatory subunit of cyclic AMP-dependent protein kinase from S49 mouse lymphoma cells: mapping to structural domains. 97:1072.
Steinberg, S. F. *See* Brett, Steinberg, de Groot, Nawroth, and Stern.
Steinberg, T. H., Newman, A. S., Swanson, J. A., and Silverstein, S. C. Macrophages possess probenecid-inhibitable organic anion transporters that remove fluorescent dyes from the cytoplasmic matrix. 105:2695.
—, **Swanson, J. A., and Silverstein, S. C.** A prelysosomal compartment sequesters membrane-impermeant fluorescent dyes from the cytoplasmic matrix of J774 macrophages. 107:887.
Steinbusch, H. W. *See* Yamamoto, Steinbusch, and Jessell.
Steiner, A. L. *See* Browne, Lockwood, Su, Beavo, and Steiner.
— *See* Murtaugh, Steiner, and Davies.
Steiner, D. F. *See* Madsen, Larsson, Rehfeld, Schwartz, Lernmark, Labrecque, and Steiner.
Steiner, E. K., Eissenberg, J. C., and Elgin, S. C. R. A cytological approach to the ordering of events in gene activation using the *Sgs-4* locus of *Drosophila melanogaster*. 99:233.
Steiner, S. *See* Via, Sramek, Larriba, and Steiner.
Steinert, P. M. *See* Aynardi, Steinert, and Goldman.
— *See* Steven, Hainfeld, Trus, Wall, and Steinert.
— *See* Yuspa, Kilkenny, Steinert, and Roop.
— *See* Zackroff, Goldman, Jones, Steinert, and Goldman.
Steinhardt, R. A. *See* Lee and Steinhardt.
Steinhart, R. *See* Vogel, Thilo, Schwarz, and Steinhart.
Steinkamp, J. A. *See* Crissman, Darzynkiewicz, Tobey, and Steinkamp.

Steinman, R. M., Mellman, I. S., Muller, W. A., and Cohn, Z. A. Endocytosis and the recycling of plasma membrane. 96:1.
— *See* Kielian, Steinman, and Cohn.
— *See* Mellman, Plutner, Steinman, Unkeless, and Cohn.
— *See* Mellman, Steinman, Unkeless, and Cohn.
— *See* Muller, Steinman, and Cohn.
Steinmetz, S. A. *See* Adair, Steinmetz, Mattson, Goodenough, and Heuser.
Steitz, J. A., Berg, C., Hendrick, J. P., La Branche-Chabot, H., Metspalu, A., Rinke, J., and Yario, T. A 5S rRNA/L5 complex is a precursor to ribosome assembly in mammalian cells. 106:545.
Stellmach, V. *See* Kim, Stellmach, Javors, and Fuchs.
Stelzer, E. H. K. *See* Bacallao, Antony, Dotti, Karsenti, Stelzer, and Simons.
— *See* Rosa, Weiss, Pepperkok, Ansorge, Niehrs, Stelzer, and Huttner.
— *See* van Meer, Stelzer, Wijnaendts-van-Resandt, and Simons.
Stemerman, M. B. *See* Maciag, Hoover, Sterman, and Weinstein.
— *See* Maciag, Kadish, Wilkins, Stemerman, and Weinstein.
Stemkowski, C. J. *See* Lemasters, Stemkowski, Ji, and Thurman.
Stemple, D. L. *See* Olmsted, Stemple, Saxton, Neighbors, and McIntosh.
— *See* Saxton, Stemple, Leslie, Salmon, Zavortink, and McIntosh.
Stenberg, P. E., McEver, R. P., Shuman, M. A., Jacques, Y. V., and Bainton, D. F. A platelet alpha-granule membrane protein (GMP-140) is expressed on the plasma membrane after activation. 101:880.
—, **Shuman, M. A., Levine, S. P., and Bainton, D. F.** Redistribution of alpha-granules and their contents in thrombin-stimulated platelets. 98:748.
— *See* Boyles, Fox, Phillips, and Stenberg.
— *See* Takemura, Stenberg, Bainton, and Werb.
Stendahl, O. *See* Särndahl, Lindroth, Bengtsson, Fällman, Gustavsson, Stendahl, and Andersson.
Stendahl, O. I., Hartwig, J. H., Brotschi, E. A., and Stossel, T. P. Distribution of actin-binding protein and myosin in macrophages during spreading and phagocytosis. 84:215.
Stenman, S. *See* Laurila, Virtanen, Lehto, Vartio, and Stenman.
Stenn, K. S., Madri, J. A., Tinghitella, T., and Terranova, V. P. Multiple mechanisms of dissociated epidermal cell spreading. 96:63.
Stenoien, D. L. *See* Pfister, Wagner, Stenoien, Brady, and Bloom.
Stephens, R. E. Equimolar heterodimers in microtubules. 94:263.
— Evidence for a tubulin-containing lipid-protein structural complex in ciliary membranes. 100:1082.
— Reconstitution of ciliary membranes containing tubulin. 96:68.
— *See* Dentler, Pratt, and Stephens.
— *See* Linck and Stephens.
— *See* Mooseker and Stephens.
— *See* Stommel, Stephens, and Alkon.
— *See* Stommel, Stephens, Masure, and Head.
— *See* Tilney, Tilney, Stephens, Merte, Drenckhahn, Cotanche, and Bretscher.
Stephens, R. W., Pöllanen, J., Tapiovaara, H., Leung, K.-C., Sim, P.-S., Salonen, E.-M., Rønne, E., Behrendt, N., Danø, K., and Vaheri, A. Activation of pro-urokinase and plasminogen on human sarcoma cells: a proteolytic system with surface-bound reactants. 108:1987.
Stepp, M. A. *See* Hynes, Marcantonio, Stepp, Urry, and Yee.
Sterchi, E. E. *See* Hauri, Sterchi, Bienz, Fransen, and Marxer.
Stern, D., Brett, J., Harris, K., and Nawroth, P. Participation of endothelial cells in the protein C–protein S anticoagulant pathway: the synthesis and release of protein S. 102:1971.
— *See* Gajdusek, Carbon, Ross, Nawroth, and Stern.
Stern, D. M. *See* Brett, Steinberg, de Groot, Nawroth, and Stern.
Stern, R. *See* Tseng, Savion, Gospodarowicz, and Stern.
Sternberg, E. *See* Olson, Sternberg, Hu, Spizz, and Wilcox.
Sternberger, N. H. *See* Trapp, Itoyama, Sternberger, Quarles, and Webster.
Steven, A. C., Hainfield, J. F., Trus, B. L., Wall, J. S., and Steinert, P. M. Epidermal keratin filaments assembled in vitro have masses-per-unit-length that scale according to averge subunit mass: structural basis for homologous packing of subunits in intermediate filaments. 97:1937.
—, **Hainfield, J. F., Wall, J. S., and Steer, C. J.** Mass distribution of coated vesicles isolated from liver and brain: analysis by scanning transmission electron microscopy. 97:1714.
— *See* Steer, Bisher, Blumenthal, and Steven.
Stevens, J. K. *See* Jacobs and Stevens.
— *See* Sasaki-Sherrington, Jacobs, and Stevens.
Stevens, S. E., Jr. *See* Nierzwicki-Bauer, Balkwill, and Stevens.
Stevens, T. H., Rothman, J. H., Payne, G. S., and Schekman, R. Gene dosage-dependent secretion of yeast vacuolar carboxypeptidase Y. 102:1551.
— *See* Blachly-Dyson and Stevens.
— *See* Roberts, Pohlig, Rothman, and Stevens.
— *See* Rothman, Yamashiro, Raymond, Kane, and Stevens.
Stevenson, B. *See* Gumbiner, Stevenson, and Grimaldi.
Stevenson, B. R., Anderson, J. M., Goodenough, D. A., and Mooseker, M. S. Tight junction structure and ZO-1 content are identical in two strains of Madin–Darby canine kidney cells which differ in transepithelial resistance. 107:2401.
—, **and Goodenough, D. A.** *Zonulae occludentes* in junctional complex–enriched fractions from mouse liver: preliminary morphological and biochemical characterization. 98:1209.
—, **Siliciano, J. D., Mooseker, M. S., and Goodenough, D. A.** Identification of ZO-1: a high molecular weight polypeptide associated with the tight junction (zonula occludens) in a variety of epithelia. 103:755.
— *See* Anderson, Stevenson, Jesaitis, Goodenough, and Mooseker.
— *See* Anderson, Van Itallie, Peterson, Stevenson, Carew, and Mooseker.
— *See* Fleming, McConnell, Johnson, and Stevenson.
Stewart, C. M. *See* Hui, Stewart, Carpenter, and Stewart.
Stewart, D. *See* Dixon, Stewart, Grinstein, and Spiegel.
Stewart, M., Kensler, R. W., and Levine, R. J. C. Three-dimensional reconstruction of thick filaments from *Limulus* and scorpion muscle. 101:402.
—, **Quinlan, R. A., and Moir, R. D.** Molecular interactions in paracrystals of a fragment corresponding to the α-helical coiled-coil rod portion of glial fibrillary acidic protein: evidence for an antiparallel packing of molecules and polymorphism related to intermediate filament structures. 109:225.
— *See* Buckley, Raju, and Stewart.
— *See* Kensler, Levine, and Stewart.
— *See* Kensler and Stewart.
— *See* Noegel, Rapp, Lottspeich, Schleicher, and Stewart.
— *See* Quinlan and Stewart.
— *See* Wischik, Crowther, Stewart, and Roth.
Stewart, T. P. *See* Hui, Stewart, Carpenter, and Stewart.
Stick, R., Angres, B., Lehner, C. F., and Nigg, E. A. The fates of chicken nuclear lamin proteins during mitosis: evidence for a reversible redistribution of lamin B_2 between inner nuclear membrane and elements of the endoplasmic reticulum. 107:397.
— *See* Krohne, Stick, Kleinschmidt, Moll, Franke, and Hausen.
— *See* Lehner, Stick, Eppenberger, and Nigg.
Stickel, S. K., and Wang, Y. Alpha-actinin–containing aggregates in transformed cells are highly dynamic structures. 104:1521.
—, **and Wang, Y.-l.** Synthetic peptide GRGDS induces dissociation of alpha-actinin and vinculin from the sties of focal contacts. 107:1231.
Stidwill, R. P., Wysolmerski, T., and Burgess, D. R. The brush border cytoskeleton is not static: in vivo turnover of proteins. 98:641.
Stieber, A. *See* Gonatas, Stieber, Hickey, Herbert, and Gonatas.
— *See* Gonatas, Stieber, Olsnes, and Gonatas.
Stieger, B., Matter, K., Baur, B., Bucher, K. Höchli, M., and Hauri, H.-P. Dissection of the asynchronous transport of intestinal microvillar hydrolases to the cell surface. 106:1853.
— *See* Bartles, Feracci, Stieger, and Hubbard.
— *See* Gorr, Stieger, Fransen, Kedinger, Marxer, and Hauri.
— *See* Marxer, Stieger, Quaroni, Kashgarian, and Hauri.
Stiles, C. D. *See* Singh, Chaikin, Pledger, Scher, and Stiles.
— *See* Singh, Chaikin, and Stiles.
Stingl, G. *See* Schuler, Hintner, Wolff, Fritsch, and Stingl.
Stirewalt, M. *See* Cohen, Reinhardt, Castellani, Norton, and Stirewalt.
Stirling, C. E., and Lee, A. [^{3}H]Ouabain autoradiography of frog retina. 85:313.
Stirling, V. B. *See* Smith and Stirling.
Stirpe, N. S. *See* Goetinck, Stirpe, Tsonis, and Carlone.
Stirzaker, S. C., Whitfeld, P. L., Christie, D. L., Bellamy, A. R., and Both, G. W. Processing of rotavirus glycoprotein VP7: implications for the retention of the protein in the endoplasmic reticulum. 105:2897.
Stocco, R. C. *See* Armelin, Stocco, and Armelin.
Stockdale, F. E. *See* Crow, Olson, and Stockdale.
— *See* Levine and Stockdale.
— *See* Miller, Crow, and Stockdale.
— *See* Miller and Stockdale.
— *See* Schafer and Stockdale.
Stockert, R. J. *See* Novikoff, La Russo, Novikoff, Stockert, Yam, and Le Sage.
Stockhausen, D. *See* Galvin, Stockhausen, Meyers-Hutchins, and Frazier.
Stoeckli, E. T. *See* Ruegg, Stoeckli, Lanz, Streit, and Sonderegger.
Stoehr, M. *See* Franke, Kleinschmidt, Spring, Krohne, Grund, Trendelenburg, Stoehr, and Scheer.
Stokes, D. L., and DeRosier, D. J. The variable twist of actin and its modulation by actin-binding proteins. 104:1005.
Stoler, A., Kopan, R., Divic, M., and Fuchs, E. The use of monospecific antisera and cRNA probes to localize the major changes in keratin expression during normal and abnormal epidermal differentiation. 107:427.
Stollar, B. D. *See* Di Padua Mathieu, Mura, Frado, Woodcock, and Stollar.

— *See* Lancillotti, Lopez, Alonso, and Stollar.
Stollberg, J., and Fraser, S. E. Acetylcholine receptors and concanavalin A–binding sites on cultured *Xenopus* muscle cells: electrophoresis, diffusion, and aggregation. 106:1723.
—, **and Fraser, S. E.** Acetylcholine receptors and concanavalin A–binding sites on cultured *Xenopus* muscle cells: electrophoresis, diffusion, and aggregation. 107:1397.
Stoller, T. J., and Shields, D. Retrovirus-mediated expression of preprosomatostatin: posttranslational processing, intracellular storage, and secretion in GH_3 pituitary cells. 107:2087.
—, **and Shields, D.** The propeptide of preprosomatostatin mediates intracellular transport and secretion of α-glogin from mammalian cells. 108:1647.
Stolpen, A. H., Golan, D. E., and Pober, J. S. Tumor necrosis factor and immune interferon act in concert to slow the lateral diffusion of proteins and lipids in human endothelial cell membranes. 107:781.
Stommel, E. W., Stephens, R. E., and Alkon, D. L. Motile statocyst cilia transmit rather than directly transduce mechanical stimuli. 87:652.
—, **Stephens, R. E., Masure, H. R., and Head, J. F.** Specific localization of scallop gill epithelial calmodulin in cilia. 92:622.
Stone, D. K. *See* Marnell, Mathis, Stookey, Shia, Stone, and Draper.
Stone, G. C. *See* Hammerschlag, Stone, Bolen, Lindsey, and Ellisman.
Stookey, M. *See* Colbaugh, Stookey, and Draper.
— *See* Marnell, Mathis, Stookey, Shia, Stone, and Draper.
— *See* Marnell, Stookey, and Draper.
Stoolman, L. M., and Rosen, S. D. A possible role for cell-surface carbohydrate-binding molecules in lymphocyte recirculation. 96:722.
—, **Tenforde, T., and Rosen, S. D.** Phosphomannosyl receptors may participate in the adhesive interaction between lymphocytes and high endothelial venules. 99:1535.
— *See* Yednock, Butcher, Stoolman, and Rosen.
— *See* Yednock, Stoolman, and Rosen.
Stoorvogel, W., Geuze, H. J., Griffith, J. M., Schwartz, A. L., and Strous, G. J. Relations between the intracellular pathways of the receptors for transferrin, asialoglycoprotein, and mannose 6-phosphate in human hepatoma cells. 108:2137.
—, **Geuze, H. J., Griffith, J. M., and Strous, G. J.** The pathways of endocytosed transferrin and secretory protein are connected in the *trans*-Golgi reticulum. 106:1821.
—, **Geuze, H. J., and Strous, G. J.** Sorting of endocytosed transferrin and asialoglycoprotein occurs immediately after internalization in HepG2 cells. 104:1261.
— *See* Geuze, Stoorvogel, Strous, Slot, Zijderhand-Bleekemolen, and Mellman.
Stopelli, M. P. *See* Garcia, Stopelli, Decker, and Rosner.
—, **Verde, P., Grimaldi, G., Locatelli, E. K., and Blasi, F.** Increase in urokinase plasminogen activator mRNA synthesis in human carcinoma cells is a primary effect of the potent tumor promoter, phorbol myristate acetate. 102:1235.
— *See* Garcia, Stoppelli, Thompson, Decker, and Rosner.
— *See* Picone, Kajatniak, Nielson, Behrendt, Mistronicola, Cubellis, Stoppelli, Pedersen, Danø, and Blasi.
Storrie, B., Pool, R. R., Jr., Sachdeva, M., Maurey, K. M., and Oliver, C. Evidence for both prelysosomal and lysosomal intermediates in endocytic pathways. 98:108.
— *See* Adams, Maurey, and Storrie.
— *See* Ferris, Brown, Park, and Storrie.
Stoscheck, C. M., and Carpenter, G. "Down regulation" of epidermal growth factor receptors: direct demonstration of receptor degradation in human fibroblasts. 98:1048.
Stöß, H. *See* Swoboda, Holmdahl, Stöß, and von der Mark.
Stossel, T. P. *See* Hartwig, Chambers, and Stossel.
— *See* Hartwig, Tyler, and Stossel.
— *See* Lind, Janmey, Chaponnier, Herbert, and Stossel.
— *See* Stendahl, Hartwig, Brotschi, and Stossel.
— *See* Zaner and Stossel.
Stow, J. L., and Farquhar, M. G. Distinctive populations of basement membrane and cell membrane heparan sulfate proteoglycans are produced by cultured cell lines. 105:529.
—, **Kjéllen, L., Unger, E., Höök, M., and Farquhar, M. G.** Heparan sulfate proteglycans are concentrated on the sinusoidal plasmalemmal domain and in intracellular organelles of hepatocytes. 100:975.
Stowe, S. *See* de Couet, Stowe, and Blest.
Stracher, A. *See* Rosenberg and Stracher.
— *See* Rosenberg, Stracher, and Lucas.
Stratford, C. A., and Brown, S. S. Isolation of an actin-binding protein from membranes of *Dictyostelium discoideum*. 100:727.
Strauch, A. R., and LaFountain, J. R., Jr. Centrifugation shearing exposes filamentous networks in cortical regions of crane-fly spermatocytes. 93:670.
—, **Luna, E. J., and LaFountain, J. R., Jr.** Biochemical analysis of actin in crane-fly gonial cells: evidence for actin in spermatocytes and spermatids—but not sperm. 86:315.
Sträuli, P. *See* Müller-Glauser, Humbel, Glatt, Sträuli, Winterhalter, and Bruckner.
Straus, D. S., and Coppock, D. L. Growth control variant cell line having increased serum requirement and decreased response to platelet-derived growth factor: reversion by 5-azacytidine. 99:1838.
Strauss, J. F., III *See* Paavola and Strauss.
— *See* Paavola, Strauss, Boyd, and Nestler.
Streeter, H. B., and Rees, D. A. Fibroblast adhesion to RGDS shows novel features compared with fibronectin. 105:507.
Streeter, P. R., Rouse, B. T. N., and Butcher, E. C. Immunohistologic and functional characterization of a vascular addressin involved in lymphocyte homing into peripheral lymph nodes. 107:1853.
— *See* Wu, Jalkanen, Streeter, and Butcher.
Strehler, E. E., Pelloni, G., Heizmann, C. W., and Eppenberger, H. M. Biochemical and ultrastructural aspects of M_r 165,000 M-protein in cross-striated chicken muscle. 86:775.
— *See* Eppenberger, Perriard, Rosenberg, and Strehler.
Streit, P. *See* Ruegg, Stoeckli, Lanz, Streit, and Sonderegger.
Streuli, C. H. *See* Griffiths, Perkins, Streuli, and Critchley.
Strichartz, G. R., Small, R. K., and Pfenninger, K. H. Components of the plasma membrane of growing axons. III. Saxitoxin binding to sodium channels. 98:1444.
Strickland, S. *See* Canipari, O'Connell, Meyer, and Strickland.
Stricklin, G. P. *See* Postlethwaite, Raghow, Striklin, Poppleton, Seyer, and Kang.
Strittmatter, W. J. *See* Roe, Farach, Strittmatter, and Lennarz.
Strohman, R. C. *See* Bandman and Strohman.
— *See* Cirsona and Strohman.
Strome, S. Fluorescence visualization of the distribution of microfilaments in gonads and early embryos of the nematode *Caenorhabditis elegans*. 103:2241.
— *See* Ward, Roberts, Strome, Pavalko, and Hogan.
Stromer, M. H. *See* Yamaguchi, Robson, and Stromer.
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Stroud, R. M. *See* Klymkowsky, Heuser, and Stroud.
— *See* Mitra, McCarthy, and Stroud.
Strous, G. J., Du Maine, A., Zijderhand-Bleedemolen, J. E., Slot, J. W., and Schwartz, A. L. Effect of lysosomotropic amines on the secretory pathway and on the recycling of the asialoglycoprotein receptor in human hepatoma cells. 101:531.
—, **van Kerkhof, P., Willemsen, R., Geuze, H. J., and Berger, E. G.** Transport and topology of galactysyltransferase in endomembranes of HeLa cells. 97:723.
— *See* Geuze, Stoorvogel, Strous, Slot, Zijderhand-Bleekemolen, and Mellman.
— *See* Stoorvogel, Geuze, Griffith, Schwartz, and Strous.
— *See* Stoorvogel, Geuze, Griffith, and Strous.
— *See* Stoorvogel, Geuze, and Strous.
— *See* Zijerhand-Bleekemolen, Schwartz, Slot, Strous, and Geuze.
Strous, G. J. A. M., Willemsen, R., van Kerkhof, P., Slot, J. W., Geuze, H. J., and Lodish, H. F. Vesicular stomatitis virus glycoprotein, albumin, and transferrin are transported to the cell surface via the same Golgi vesicles. 97:1815.
— *See* Geuze, Slot, Strous, Hasilik, and von Figura.
— *See* Geuze, Slot, Strous, Lodish, and Schwartz.
Struck, D. K. *See* Pagano, Longmuir, Martin, and Struck.
Struve, A. *See* Isaacs, Kim, Struve, and Fulton.
Stryer, L. *See* Oi, Glazer, and Stryer.
— *See* Pardee, Simpson, Stryer, and Spudich.
— *See* Taylor, Reidler, Spudich, and Stryer.
— *See* Yamamoto, Pardee, Reidler, Stryer, and Spudich.
Stubbs, J. *See* Decker, Greggs, Duggan, Stubbs, and Horwitz.
Studer, D., Moor, H., and Gross, H. Single bacteriorhodopsin molecules revealed on both surfaces of freeze-dried and heavy metal-decorated purple membranes. 90:153.
Studzinski, G. P. *See* Brelvi and Studzinski.
Stuekenbrok, H. *See* Kartenbeck, Stuekenbrok, and Helenius.
Stukenbrok, H. *See* Milici, Watrous, Stukenbrok, and Palade.
— *See* Navone, Jahn, Di Gioia, Stukenbrok, Greengard, and De Camilli.
Stump, R. F., and Robinson, K. R. *Xenopus* neural crest cell migration in an applied electrical field. 97:1226.
Stürzl, R. *See* Vilmart-Seuwen, Kersken, Stürzl, and Plattner.
Stya, M., and Axelrod, D. Mobility and detergent extractability of acetylcholine receptors on cultured rat myotubes: a correlation. 97:49.
— *See* Axelrod, Bauer, Stya, and Christian.

Su, J.-L. *See* Browne, Lockwood, Su, Beavo, and Steiner.
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Suard, Y. M. L., Haeuptle, M.-T., Farinon, E., and Kraehenbuhl, J.-P. Cell proliferation and milk protein gene expression in rabbit mammary cell cultures. 96:1435.
Suarez, H. *See* Azzarone, Suarez, Mingari, Moretta, and Fauci.
Suárez-Quian, C. A. *See* Hadley, Byers, Suárez, Quian, Kleinman, and Dym.
Subjeck, J. R., Shyy, T., Shen, J., and Johnson, R. J. Association between the mammalian 110,000-dalton heat-shock protein and nucleoli. 97:1389.
Subrahmanyan, L. *See* Gotlieb, May, Subrahmanyan, and Kalnins.
— *See* Gotlieb, Subrahmanyan, and Kalnins.
Subramani, S. *See* Gould, Keller, Hosken, Wilkinson, and Subramani.
— *See* Gould, Keller, and Subramani.
Suchard, S. J., Lattanzio, F. A., Jr., Rubin, R. W., and Pressman, B. C. Stimulation of catecholamine secretion from cultured chromaffin cells by an ionophore-mediated rise in intracellular sodium. 94:531.
— *See* Bourguignon, Suchard, and Kalomiris.
— *See* Bourguignon, Suchard, Nagpal, and Glenney.
— *See* Bourguignon, Walter, Suchard, and Balazovich.
Sudo, H., Kodama, H., Amagai, Y., Yamamoto, S., and Kasai, S. In vitro differentiation and calcification in a new clonal osteogenic cell line derived from newborn mouse calvaria. 96:191.
Sudo, T. *See* Stanley, Sudo, and Carver.
Sue-A-Quan, A. *See* Kelvin, Simard, Sue-A-Quan, and Connolly.
Sueoka, N. *See* Hsieh and Sueoka.
Sugahara, K., Caldwell, J. H., and Mason, R. J. Electrical currents flow out of domes formed by cultured epithelial cells. 99:1541.
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Sugino, H., and Matsumura, F. Fragmin induces tension reduction of actomyosin threads in the presence of micromolar levels of Ca^{2+}. 96:199.
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—, **Gordon, M. K., Seyer, J., Dublet, B., van der Rest, M., and Olsen, B. R.** Immunoidentification of type XII collagen in embryonic tissues. 109:939.
—, **and Hay, E. D.** Response of basal epithelial cell surface and cytoskeleton to solubilized extracellular matrix molecules. 91:45.
—, **and Hay, E. D.** The identification of extracellular matrix (ECM) binding sites on the basal surface embryonic corneal epithelium and the effect of ECM binding on epithelial collagen production. 102:1907.
— *See* Tranter, Sugrue, and Schwartz.
Suh, K., Bergmann, J. E., and Gabel, C. A. Selective retention of monoglucosylated high mannose oligosaccharides by a class of mutant vesicular stomatitis virus G proteins. 108:811.
— *See* Wallis, Ellis, Suh, and Pfenninger.
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— *See* Welch and Suhan.
Sullivan, K. F., and Cleveland, D. W. Sequence of a highly divergent β tubulin gene reveals regional heterogeneity in the β tubulin polypeptide. 99:1754.
— *See* Earnshaw, Sullivan, Machlin, Cooke, Kaiser, Pollard, Rothfield, and Cleveland.
— *See* Wilson, Miller, Pfeffer, Sullivan, and Detrich.
Sullivan, R. *See* Davidson, Klagsbrun, Hill, Buckley, Sullivan, Brewer, and Woodward.
Sullivan, S. J., Daukas, G., and Zigmond, S. H. Asymmetric distribution of the chemotactic peptide receptor on polymorphonuclear leukocytes. 99:1461.
—, **and Zigmond, S. H.** Chemotactic peptide receptor modulation in polymorphonuclear leukocytes. 85:703.
— *See* Zigmond, Sullivan, and Lauffenburger.
Sullivan, W. *See* Minoo, Sullivan, Solomon, Martin, Toft, and Scott.
Summerhayes, I. C., Cheng, Y. S., Sun, T. T., and Chen, L. B. Expression of keratin and vimentin intermediate filaments in rabbit bladder epithelial cells at different stages of benzo[a]pyrene-induced neoplastic progression. 90:63.
Sumper, M. *See* Ertl, Mengele, Wenzl, Engel, and Sumper.
Sun, T.-T. *See* Aebi, Fowler, Rew, and Sun.
— *See* Dale, Holbrook, Kimball, Hoff, and Sun.
— *See* Eichner, Bonitz, and Sun.
— *See* Eichner, Sun, and Aebi.
— *See* Lynch, O'Guin, Hardy, Mak, and Sun.
— *See* Ma and Sun.
— *See* Nelson and Sun.
— *See* Schermer, Galvin, and Sun.
— *See* Summerhayes, Cheng, Sun, and Chen.
— *See* Tseng, Hatchell, Tierney, Huang, and Sun.
— *See* Weiss, Eichner, and Sun.
— *See* Woodcock-Mitchell, Eichner, Nelson, and Sun.
Sundan, A. *See* Sandvig, Sundan, and Olsnes.
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Sung, L. A., Kabat, E. A., and Chien, S. Interaction energies in lectin-induced erythrocyte aggregation. 101:652.
—, **Kabat, E. A., and Chien, S.** Interaction of lectins with membrane receptors on erythrocyte surfaces. 101:646.
—, **Nelson, R. S., and Silverstein, S. C.** Yeast mannans inhibit binding and phagocytosis of zymosan by mouse peritoneal macrophages. 96:160.
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—, **and Dentler, W. L.** Release of intact microtuble-capping structures from *Tetrahymena* cilia. 107:2259.
—, **and Rebhun, L. I.** Purification and characterization of oocyte cytoplasmic tubulin and meiotic spindle tubulin of the surf clam *Spisula solidissima*. 98:253.
Suprynowicz, F. *See* Hollenbeck, Suprynowicz, and Cande.
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Surek, B. *See* McFadden, Schulze, Surek, Salisbury, and Melkonian.
— *See* Salisbury, Baron, Surek, and Melkonian.
Surprenant, A. Correlation between electrical activity and ACTH/β-endorphin secretion in mouse pituitary tumor cells. 95:559.
Sussman, H. H. *See* Enns, Larrick, Suomalainen, Schroder, and Sussman.
Sussman, I., Prettyman, R., and O'Brien, T. G. Phorbol esters and gene expression: the role of rapid changes in K^+ transport in the induction of ornithine decarboxylase by 12-0-tetradecanoylphorbol-13-acetate in BALB/c 3T3 cells and a mutant cell line defective in $Na^+K^+Cl^-$ cotransport. 101:2316.
Sutherland, A. E., Calarco, P. G., and Damsky, C. H. Expression and function of cell surface extracellular matrix receptors in mouse blastocyst attachment and outgrowth. 106:1331.
Suzuki, C. K. *See* Bonifacino, Suzuki, Lippincott-Schwartz, Weissman, and Klausner.
Suzuki, F. *See* Kato, Iwamoto, Koike, and Suzuki.
Suzuki, K. *See* Trapp, Quarles, and Suzuki.
Suzuki, S., and Pollack, G. H. Bridgelike interconnections between thick filaments in stretched skeletal muscle fibers observed by the freeze-fracture method. 102:1093.
— *See* Argraves, Suzuki, Arai, Thompson, Pierschbacher, and Ruoslahti.
— *See* Dedhar, Argraves, Suzuki, Ruoslahti, and Pierschbacher.
— *See* Kato, Koike, Suzuki, and Kimata.
— *See* Takeda, Iwata, Suzuki, Brown, and Kimata.
Swan, J. A., and Solomon, F. Reformation of the marginal band of avian erythrocytes in vitro using calf-brain tubulin: peripheral determinants of microtubule form. 99:2108.
Swan, M. A., Linck, R. W., Ito, S., and Fawcett, D. W. Structure and function of the undulating membrane in spermatozoan propulsion in the toad *Bufo marinus*. 85:866.
Swank, R. T. *See* Brown, Novak, and Swank.
— *See* Brown, Novak, Takeuchi, Moore, Medda, and Swank.
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— *See* Brier, Fechheimer, Swanson, and Taylor.
— *See* Luna, Fowler, Swanson, Branton, and Taylor.
Swanson, J. A., Yirinec, B. D., and Silverstein, S. C. Phorbol esters and horseradish peroxidase stimulate pinocytosis and redirect the flow of pinocytosed fluid in macrophages. 100:851.
— *See* McNeil, Swanson, Wright, Silverstein, and Taylor.
— *See* Steinberg, Newman, Swanson, and Silverstein.
— *See* Steinberg, Swanson, and Silverstein.
Swanson, M. E., Elste, A. M., Greenberg, S. M., Schwartz, J. H., Aldrich, T. H., and Furth, M. E. Abundant expression of *ras* proteins in *Aplysia* neurons. 103:485.
Swanson, M. S. *See* Piñol-Roma, Swanson, Gall, and Dreyfuss.
Sweet, S. C., Rogers, C. M., and Welsh, M. J. Calmodulin stabilization of kinetochore microtubule structure to the effect of nocodazole. 107:2243.

Swenson, K. I. *See* Westendorf, Swenson, and Ruderman.
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Swiedler, S. J. *See* Williams, Swiedler, and Hart.
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Swoboda, B., Holmdahl, R., Stöß, H., and von der Mark, K. Cellular heterogeneity in cultured human chondrocytes identified by antibodies specific for α2(XI) collagen chains. 109:1363.
Sylvester, S. R. *See* Disney, Johnson, Magnuson, Sylvester, and Reeves.
Symer, D. E. *See* Repasky, Symer, and Bankert.
Szaniszlo, P. J. *See* Jacobs, Adams, Szaniszlo, and Pringle.
Szczesna-Skorupa, E., and Kemper, B. NH-terminal substitutions of basic amino acids induce translocation across the microsomal membrane and glycosylation of rabbit cytochrome P450IIC2. 108:1237.
Szego, C. M. *See* Rambo and Szego.
Sziegoleit, A. *See* Fussle, Bhakdi, Sziegoleit, Tranum-Jensen, Kranz, and Wellensiek.
Sztul, E. S., Biemesderfer, D., Caplan, M. J., Kashgarian, M., and Boyer, J. L. Localization of Na^+, K^+-ATPase α-subunit to the sinusoidal and lateral but not canalicular membranes of rat hepatocytes. 104:1239.
—, **Hendrick, J. P., Kraus, J. P., Wall, D., Kalousek, F., and Rosenberg, L. E.** Import of rat ornithine transcarbamylase precursor into mitochondria: two-step processing of the leader peptide. 105:2631.
—, **Howell, K. E., and Palade, G. E.** Biogenesis of the polymeric IgA receptor in rat hepatocytes. I. Kinetic studies of its intracellular forms. 100:1248.
—, **Howell, K. E., and Palade, G. E.** Biogenesis of the polymeric IgA receptor in rat hepatocytes. II. Localization of its intracellular forms by cell fractionation studies. 100:1255.
—, **Howell, K. E., and Palade, G. E.** Intracellular and transcellular transport of secretory component and albumin in rat hepatocytes. 97:1582.
— *See* Meier, Sztul, Reuben, and Boyer.

T

Tabak, H. F. *See* Distel, Van Der Leÿ, Veenhuis, and Tabak.
Tabiowo, A. *See* King, Tabiowo, and Fryer.
Tacchetti, C., Quarto, R., Nitsch, L., Hartmann, D. J., and Cancedda, R. In vitro morphogenesis of chick embryo hypertrophic cartilage. 105:999.
— *See* Descalzi, Cancedda, Manduca, Tacchetti, Fossa, Quarto, and Cancedda.
Tack, B. *See* Glenney, Tack, and Powell.
Tadvalkar, G., and Pinto da Silva, P. In vitro, rapid, massive assembly of gap junctions is induced by cytoskeleton disrupters. 96:1279.
Tafuri, S. R. *See* Kuczmarski, Tafuri, and Parysek.
Taggart, B. N. *See* Pitelka and Taggart.
— *See* Pitelka, Taggart, and Hamamoto.
Taguchi, O. *See* Neubauer, Chung, McCormick, Taguchi, Thompson, and Cunha.
Tague, B. W., and Chrispeels, M. J. The plant vacuolar protein, phytohemagglutinin, is transported to the vacuole of transgenic yeast. 105:1971.
Tai, H. H. *See* Kelvin, Simard, Tai, Yamaguchi, and Connolly.
Tajima, S., Lauffer, L., Rath, V. L., and Walter, P. The signal recognition particle receptor is a complex that contains two distinct polypeptide chains. 103:1167.
Takada, Y., and Hemler, M. E. The primary structure of the VLA-2/collagen receptor α^2 subunit (platelet GPIa): homology to other integrins and the presence of a possible collagen-binding domain. 109:397.
Takahashi, M. *See* Haga, Saimi, Takahashi, and Kung.
— *See* Hiwatashi, Haga, and Takahashi.
Takano-Ohmuro, H., Obinata, T., Kawashima, M., Masaki, T., and Tanaka, T. Embryonic chicken skeletal, cardiac, and smooth muscles express a common embryo-specific myosin light chain. 100:2025.
Takasaki, S., Emling, F., and Leive, L. Variants deficient in phagocytosis of latex beads isolated from the murine macrophage-like cell line J774. 98:2198.
Takasaki, Y. *See* Deng, Takasaki, and Tan.
Takata, K., and Singer, S. J. Phosphotyrosine-modified proteins are concentrated at the membranes of epithelial and endothelial cells during tissue development in chick embryos. 106:1757.
Takeda, M., Iwata, H., Suzuki, S., Brown, K. S., and Kimata, K. Correction of abnormal matrix formed by cmd/cmd chondrocytes in culture by exogenously added cartilage proteoglycan. 103:1605.
— *See* Angelides, Smith, and Takeda.
— *See* Emr, Vassarotti, Garrett, Geller, Takeda, and Douglas.
Takei, F., Kikuchi, Y., Kikuchi, A., Mizuno, S., and Shimura, K. Further evidence for importance of the subunit combination of silk fibroin in its efficient secretion from the posterior silk gland cells. 105:175.
—, **Oyama, F., Kimura, K.-I., Hyodo, A., Mizuno, S., and Shimura, K.** Reduced level of secretion and absence of subunit combination for the fibroin synthesized by a mutant silkworm, *Nd*(2). 99:2005.
Takeichi, M. *See* Duband, Dufour, Hatta, Takeichi, Edelman, and Thiery.
— *See* Hatta, Nose, Nagafuchi, and Takeichi.
— *See* Hirano, Nose, Hatta, Kawakami, and Takeichi.
— *See* Nose and Takeichi.
— *See* Ogou, Yoshida-Noro, and Takeichi.
Takemura, R., Stenberg, P. E., Bainton, D. F., and Werb, Z. Rapid redistribution of clathrin onto macrophage plasma membranes in response to Fc receptor-ligand interaction during frustrated phagocytosis. 102:55.
— *See* Aggeler, Takemura, and Werb.
— *See* Hirokawa, Takemura, and Hisanaga.
— *See* Kanai, Takemura, Oshima, Mori, Ihara, Yanagisawa, Masaki, and Hirokawa.
Takemura, S., Omori, K., Tanaka, K., Omori, K., Matsuura, S., and Tashiro, Y. Quantitative immunoferritin localization of $[Na^+,K^+]$-ATPase on canine hepatocyte cell surface. 99:1502.
Takeuchi, K. *See* Brown, Novak, Takeuchi, Moore, Medda, and Swank.
Takeyasu, K. *See* Fambrough, Takeyasu, Lippincott-Schwartz, and Siegel.
Talamás-Rohana, P., and Meza, I. Interaction between pathogenic amebas and fibronectin: substrate degradation and changes in cytoskeleton organization. 106:1787.
Talian, J. C., Olmsted, J. B., and Goldman, R. D. A rapid procedure for preparing fluorescein-labeled specific antibodies from whole antiserum: its use in analyzing cytoskeletal architecture. 97:1277.
— *See* Green, Geiger, Jones, Talian, and Goldman.
Talkad, V. *See* Gonzalez-Noriega, Grubb, Talkad, and Sly.
Tallant, E. A. *See* Cooper, McLaughlin, Tallant, and Cheung.
Tambone, W. W. *See* Kennedy, Kamel, Tambone, Vrbova, and Zak.
Tamir, H., Theoharides, T. C., Gershon, M. D., and Askenase, P. W. Serotonin storage pools in basophil leukemia and mast cells: characterization of two types of serotonin binding protein and radioautographic analysis of the intracellular distribution of ^{3}H-serotonin. 93:638.
— *See* Barasch, Gershon, Nunez, Tamir, and Al-Awqati.
— *See* Bernd, Gershon, Nunez, and Tamir.
Tamm, I. *See* Pfeffer, Wang, and Tamm.
— *See* Wang, Michl, Pfeffer, Silverstein, and Tamm.
— *See* Wang, Yin, Krueger, Caliguiri, and Tamm.
Tamm, S. *See* Tamm and Tamm.
Tamm, S. L. Flagellated ectosymbiotic bacteria propel a eucaryotic cell. 94:697.
—, **and Tamm, S.** Alternate patterns of doublet microtubule sliding in ATP-disintegrated macrocilia of the ctenophore *Beroc. 99:1364.*
—, **and Tamm, S.** Ciliary reversal without rotation of axonemal structures in ctenophore comb plates. 89:495.
—, **and Tamm, S.** Distribution of sterol-specific complexes in a continually shearing region of a plasma membrane and at procaryotic-eucaryotic cell junctions. 97:1098.
— *See* Nakamura and Tamm.
— *See* Yamin and Tamm.
Tammimen, M. *See* Sandberg, Tammimen, Hirvonen, Vuorio, and Pihlajaniemi.
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Tan, E. M. *See* Deng, Takasaki, and Tan.
— *See* Moroi, Hartman, Nakane, and Tan.
— *See* Oiins, Olins, Cacheiro, and Tan.
Tanabe, K., Mikkelsen, R. B., and Wallach, D. F. H. Calcium transport of *Plasmodium chabaudi*-infected erythrocytes. 93:680.
— *See* Mikkelsen, Tanabe, and Wallach.
Tanaka, K., Waxman, L., and Goldberg, A. L. ATP serves two distinct roles in protein degradation in reticulocytes, one requiring and one independent of ubiquitin. 96:1580.
— *See* Takemura, Omori, Tanaka, Omori, Matsuura, and Tashiro.
Tanaka, T. *See* Ito, Tanaka, Yoshida, Onoda, Ohta, Hagiwara, Itoh, Ogura, Saito, and Hidaka.
— *See* Takano-Ohmuro, Obinata, Kawashima, Masaki, and Tanaka.
Tanaka, Y., De Camilli, P., and Meldolesi, J. Membrane interactions between secretion granules and plasmalemma in three exocrine glands. 84:438.
Tanasugarn, L., McNeil, P., Reynolds, G. T., and Taylor, D. L. Microspectrofluorometry by digital image processing: measurement of cytoplasmic pH. 98:717.
— *See* McNeil, Tanasugarn, Meigs, and Taylor.

Tang, J.-P. *See* Carson, Tang, Julian, and Glasser.
— *See* Glasser, Julian, Decker, Tang, and Carson.
Tang, S.-S. *See* Kagan, Vaccaro, Bronson, Tang, and Brody.
Tang, W.-J. Y. *See* Gibbons, Tang, and Gibbons.
— *See* Mocz, Tang, and Gibbons.
Tanguay, K. E. *See* Anderson, Klier, and Tanguay.
Taniguchi, M., and Ishikawa, H. *In situ* reconstitution of myosin filaments within the myosin-extracted myofibril in cultured skeletal muscle cells. 92:324.
Taniuchi, M., and Johnson, E. M., Jr. Characterization of the binding properties and retrograde axonal transport of a monoclonal antibody directed against the rat nerve growth factor receptor. 101:1100.
— *See* DiStefano, Schweitzer, Taniuchi, and Johnson.
Tank, D. W., Fredericks, W. J., Barak, L. S., and Webb, W. W. Correction. 101:2417.
—, **Fredericks, W. J., Barak, L. S., and Webb, W. W.** Electric field-induced redistribution and postfield relaxation of low density lipoprotein receptors on cultured human fibroblasts. 101:148.
—, **Wu, E.-S., and Webb, W. W.** Enhanced molecular diffusibility in muscle membrane blebs: release of lateral constraints. 92:207.
Tanner, L. I., and Lienhard, G. E. Localization of transferrin receptors and insulin-like growth factor II receptors in vesicles from 3T3-L1 adipocytes that contain intracellular glucose transporters. 108:1537.
Tanzer, M. L. *See* Jones, Arumugham, and Tanzer.
— *See* Ledger, Uchida, and Tanzer.
Tao, W., Walter, R. J., and Berns, M. W. Laser-transected microtubules exhibit individuality of regrowth, however most free new ends of the microtubules are stable. 107:1025.
— *See* Yassin, Shefcyk, White, Tao, Volpi, Molski, Naccache, Feinstein, and Sha'afi.
Tapiovaara, H. *See* Stephens, Pöllänen, Tapiovaara, Leung, Sim, Salonen, Rønne, Behrendt, Danø, and Vaheri.
Tapscott, S. J. *See* Antin, Forry-Schaudies, Friedman, Tapscott, and Holtzer.
Taraboletti, G., Roberts, D. D., and Liotta, L. A. Thrombospondin-induced tumor cell migration: haptotaxis and chemotaxis are mediated by different molecular domains. 105: 2409.
Tardieu, A. *See* Sperling, Tardieu, and Gulik-Krzywicki.
Tardy, M. *See* Couchie, Fages, Bridoux, Rolland, Tardy, and Nunez.
Tarone, G., Ferracini, R., Galetto, G., and Comoglio, P. A cell surface integral membrane glycoprotein of 85,000 mol wt (gp85) associated with Triton X-100–insoluble cell skeleton. 99:512.
—, **Galetto, G., Prat, M., and Comoglio, P. M.** Cell surface molecules and fibronectin-mediated cell adhesion: effect of proteolytic digestion of membrane proteins. 94:179.
— *See* Albini, Allavena, Melchiori, Giancotti, Richter, Comoglio, Parodi, Martin, and Tarone.
— *See* Giancotti, Comoglio, and Tarone.
Tarpey, J. *See* Fisher, Cui, Zhang, Hartman, Grahl, Guo-Yang, Tarpey, and Damsky.
Tartakoff, A. M., and Vassalli, P. Lectin-binding sites as markers of Golgi subcompartments: proximal-to-distal maturation of oligosaccharides. 97:1243.
— *See* Chicheportiche, Vassalli, and Tartakoff.
— *See* Turner and Tartakoff.
Tash, J. S., Hidaka, H., and Means, A. R. Axokinin phosphorylation by cAMP-dependent protein kinase is sufficient for activation of sperm flagellar motility. 103:649.
—, **Krinks, M., Patel, J., Means, R. L., Klee, C. B., and Means, A. R.** Identification, characterization, and functional correlation of calmodulin-dependent protein phosphatase in sperm. 106:1625.
Tashiro, Y. *See* Masaki, Yamamoto, and Tashiro.
— *See* Matsuura, Eto, Kato, and Tashiro.
— *See* Matsuura, Masuda, Omori, Negishi, and Tashiro.
— *See* Matsuura, Nakada, Sawamura, and Tashiro.
— *See* Takemura, Omori, Tanaka, Omori, Matsuura, and Tashiro.
— *See* Yamamoto, Masaki, and Tashiro.
Tashjian, A. H., Jr. *See* Schonbrunn, Krasnoff, Westendorf, and Tashjian.
Tassin, A.-M., Maro, B., and Bornens, M. Fate of microtubule organizing centers during in vitro myogenesis. 100:35.
Tassin, A. M., Paintrand, M., Berger, E. G., and Bornens, M. The Golgi apparatus remains associated with microtubule organizing centers during myogenesis. 101:630.
Taub, M. *See* Chung, Alavi, Livingston, Hiller, and Taub.
Tauber, J.-P. *See* Gospodarowicz, Hirabayashi, Giguere, and Tauber.
Taubman, M. B., Grant, J. W., and Nadal-Ginard, B. Cloning and characterization of mammalian myosin regulatory light chain (RLC) cDNA: the RLC gene is expressed in smooth, sarcomeric, and nonmuscle tissues. 104:1505.
—, **Smith, C. W. J., Izumo, S., Grant, J. W., Endo, T., Andreadis, A., and Nadal-Ginard, B.** The expression of sarcomeric muscle-specific contractile protein genes in BC3H1 cells: BC3H1 cells resemble skeletal myoblasts that are defective for commitment to terminal differentiation. 108:1799.
Taun, T.-L. *See* Toda, Taun, Brown, and Grinnell.
Tavassoli, M., Kishimoto, T., and Katsoka, M. Liver endothelium mediates the hepatocyte's uptake of ceruloplasmin. 102:1298.
Tayip, U. *See* Egyházi, Pigon, Ossoinak, Holst, and Tayip.
Taylor, A. *See* Hogan, Taylor, Kurkinen, and Couchman.
Taylor, D. L., Blinks, J. R., and Reynolds, G. Contractile basis of ameboid movement. VIII. Aequorin luminescence during ameboid movement, endocytosis, and capping. 86:599.
—, **Reidler, J., Spudich, J. A., and Stryer, L.** Detection of actin assembly by fluorescence energy transfer. 89:362.
—, **Wang, Y.-L., and Heiple, J. M.** Contractile basis of ameboid movement. VII. Distribution of fluorescently labeled actin in living amebas. 86:590.
— *See* Amato and Taylor.
— *See* Amato, Unanue, and Taylor.
— *See* Brier, Fechheimer, Swanson, and Taylor.
— *See* Bright, Fisher, Rogowska, and Taylor.
— *See* DeBiasio, Bright, Ernst, Waggoner, and Taylor.
— *See* Fowler, Luna, Hargreaves, Taylor, and Branton.
— *See* Fowler and Taylor.
— *See* Heiple and Taylor.
— *See* Lanni, Waggoner, and Taylor.
— *See* Luby-Phelps, Lanni, and Taylor.
— *See* Luby-Phelps, Taylor, and Lanni.
— *See* Luna, Fowler, Swanson, Branton, and Taylor.
— *See* McNeil, McKenna, and Taylor.
— *See* McNeil, Murphy, Lanni, and Taylor.
— *See* McNeil, Swanson, Wright, Silverstein, and Taylor.
— *See* McNeil, Tanasugarn, Meigs, and Taylor.
— *See* Tanasugarn, McNeil, Reynolds, and Taylor.
Taylor, D. W. *See* Howard, Uni, Aikawa, Aley, Leech, Lew, Wellems, Rener, and Taylor.
Taylor, G. *See* Johnson, Taylor, and Meyer.
Taylor, H. C. *See* Erickson and Taylor.
Taylor, J. M. *See* Isom, Tevethia, and Taylor.
Taylor, J. S. *See* Deutsch, Taylor, and Price.
Taylor, K. A., Reedy, M. C., Córdova, L., and Reedy, M. K. Three-dimensional image reconstruction of insect flight muscle. I. The rigor myac layer. 109:1085.
—, **Reedy, M. C., Córdova, L., and Reedy, M. K.** Three-dimensional image reconstruction of insect flight muscle. II. The rigor actin layer. 109:1103.
Taylor, L. D., and Bandman, E. Distribution of fast myosin heavy chain isoforms in thick filaments of developing chicken pectoral muscle. 108:533.
Taylor, M. W. *See* Zannis-Hadjopoulos, Taylor, and Hand.
Taylor, P. *See* Abramson, Ellisman, Deerinck, Maulet, Gentry, Doctor, and Taylor.
Taylor, W. C. *See* Nelson, Harpster, Mayfield, and Taylor.
Taylor-Papadimitriou, J. *See* Borsi, Carnemolla, Castellani, Rosellini, Vecchio, Allemanni, Chang, Taylor-Papadimitriou, Pande, and Zardi.
Tedeschi, B., Barrett, J. N., and Keane, R. W. Astrocytes produce interferon that enhances the expression of H-2 antigens on a subpopulation of brain cells. 102:2244.
Teeter, L. D., Atsumi, S., Sen, S., and Kuo, T. DNA amplification in multidrug, cross-resistant Chinese hamster ovary cells: molecular characterization and cytogenetic localization of the amplified DNA. 103:1159.
Teitelbaum, S. L. *See* Blair, Kahn, Crouch, Jeffrey, and Teitelbaum.
— *See* Malone, Teitelbaum, Griffin, Senior, and Kahn.
Telzer, B. R., and Haimo, L. T. Decoration of spindle microtubules with dynein: evidence for uniform polarity. 89:373.
Tenen, D. G. *See* Arnaout, Gupta, Pierce, and Tenen.
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Teng, K. *See* Pan, Teng, Wu, Adam, and Johnstone.
Tennekoon, G., Zaruba, M., and Wolinsky, J. Topography of cerebroside sulfotransferase in Golgi-enriched vesicles from rat brain. 97:1107.
Tennekoon, G. I., Frangia, J., Aitchison, S., and Price, D. L. Cerebroside sulfotransferase: preparation of antibody and localization of antigen in kidney. 91:332.
—, **Yoshino, J., Peden, K. W. C., Bigbee, J., Rutkowski, J. L., Kishimoto, Y., DeVries, G. H., and McKhann, G. M.** Transfection of neonatal rat Schwann cells with SV-40 large T antigen gene under control of the metallothionein promoter. 105:2315.

Terada, M. *See* Shimoyama, Yoshida, Terada, Shimosato, Abe, and Hirohashi.
Terasaki, M., Chen, L. B., and Fujiwara, K. Microtubules and the endoplasmic reticulum are highly interdependent structures. 103:1557.
— *See* Henson, Begg, Beaulieu, Fishkind, Bonder, Terasaki, Lebeche, and Kaminer.
Termine, J. D. *See* Gehron Robey, Young, Flanders, Roche, Kondaiah, Reddi, Termine, Sporn, and Roberts.
— *See* Whitson, Harrison, Dunlap, Bowers, Fisher, Robey, and Termine.
Terpstra, A. J. *See* Rheinwald, Jorgensen, Hahn, Terpstra, O'Connell, and Plummer.
Terracio, L., Rönnstrand, L., Tingström, A., Rubin, K., Claesson-Welsh, L., Funa, K., and Heldin, C.-H. Induction of platelet-derived growth factor receptor expression in smooth muscle cells and fibroblasts upon tissue culturing. 107:1947.
Terranova, V. P., DiFlorio, R., Lyall, R. M., Hic, S., Friesel, R., and Maciag, T. Human endothelial cells are chemotactic to endothelial cell growth factor and heparin. 101:2330.
— *See* Stenn, Madri, Tinghitella, and Terranova.
Terres, G. *See* Rosoff and Terres.
Tertoolen, L. G. J. *See* Defize, Boonstra, Meisenhelder, Kruijer, Tertoolen, Tilly, Hunter, van Bergen en Henegouwen, Moolenaar, and de Laat.
— *See* de Laat, Tertoolen, van der Saag, and Bluemink.
Tessler, A., Autilio-Gambetti, L., and Gambetti, P. Axonal growth during regeneration: A quantitative autoradiographic study. 87:197.
Testuz, J. *See* Cajot, Schleuning, Medcalf, Bamat, Testuz, Liebermann, and Sordat.
Teti, A. *See* Marchisio, Cirillo, Naldini, Primavera, Teti, and Zamboni-Zallone.
Tevethia, M. J. *See* Isom, Tevethia, and Taylor.
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Thal, G. *See* Pacifici, Soltesz, Thal, Shanley, Boettiger, and Holtzer.
Thaler, T. *See* Kühlbrandt, Thaler, and Wehrli.
Thaller, C. *See* Eichele and Thaller.
Thamm, P. *See* Fehlmann, Carpentier, Le Cam, Thamm, Saunders, Brandenburg, Orci, and Freychet.
Theibert, A., and Devreotes, P. N. Cyclic 3′,5′-AMP relay in *Dictyostelium discoideum*: adaptation is independent of activation of adenylate cyclase. 97:173.
Theodorakis, J. L. *See* Hickman, Theodorakis, Greco, and Brown.
Theoharides, T. C. *See* Tamir, Theoharides, Gershon, and Askenase.
Theriot, J. *See* Woodruff, Theriot, and Burden.
Therrien, S., and Naccache, P. H. Guanine nucleotide-induced polymerization of actin in electropermeabilized human neutrophils. 109:1125.
Thesleff, I. *See* Landschulz, Thesleff, and Ekblom.
— *See* Mackie, Thesleff, and Chiquet-Ehrismann.
— *See* Vainio, Jalkanen, and Thesleff.
Theurkauf, W. E. *See* Vallee, DiBartolomeis, and Theurkauf.
Thiagarajan, P. *See* Chen, Thiagarajan, Schwartz, Harlan, and Heimark.
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— *See* Morel, Thieffry, and Manaranche.
Thiersé, D. *See* Bader, Trifaró, Langley, Thiersé, and Aunis.
Thiery, J. P. *See* Boyer, Tucker, Vallés, Franke, and Thiery.
— *See* Duband, Dufour, Hatta, Takeichi, Edelman, and Thiery.
— *See* Duband, Nuckolls, Ishihara, Hasegawa, Yamada, Thiery, and Jacobson.
— *See* Rovasio, Delouvée, Yamada, Timpl, and Thiery.
Thiery, J.-P., Delouvée, A., Grumet, M., and Edelman, G. M. Initial appearance and regional distribution of the neuron-glia cell adhesion molecule (Ng-CAM) in the chick embryo. 100:442.
— *See* Boucat, Darribère, Poole, Aoyama, Yamada, and Thiery.
— *See* Crossin, Hoffman, Grumet, Thiery, and Edelman.
— *See* Duband, Rocher, Chen, Yamada, and Thiery.
— *See* Savagner, Imhof, Yamada, and Thiery.
Thilo, L. *See* Haylett and Thilo.
— *See* Vogel, Thilo, Schwarz, and Steinhart.
Thines-Sempoux, D. *See* Wibo, Thines-Sempoux, Amar-Costesec, Beaufay, and Godelaine.
Thoenen, H. *See* Acheson, Edgar, Timpl, and Thoenen.
— *See* Acheson and Thoenen.
— *See* Barth, Korsching, and Thoenen.
— *See* Edgar, Timpl, and Thoenen.
— *See* Heumann, Korsching, Bandtlow, and Thoenen.
— *See* Saadat and Thoenen.
— *See* Schwab and Thoenen.
Thomaïdis, A. *See* Festoff, Hantaï, Soria, Thomaïdis, and Soria.
Thomas, C. *See* Ranscht, Moss, and Thomas.
Thomas, G., and Thomas, G. Translational control of mRNA expression during the early mitogenic response in Swiss mouse 3T3 cells: identification of specific proteins. 103:2137.
Thomas, J. H. *See* Huffaker, Thomas, and Botstein.
Thomas, J. O. *See* Li and Thomas.
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— *See* Schreiber, Kenney, Kowalski, Thomas, Gimenez-Gallego, Rios-Candelore, Di Salvo, Barritault, Courty, Courtois, Moenner, Loret, Burgess, Mehlman, Friesel, Johnson, and Maciag.
Thomas, P. S. *See* Shepherd, Mulvihill, Thomas, and Palmiter.
Thomas, S. J. *See* Heidemann, Hamborg, Thomas, Song, Lindley, and Chu.
Thomasson, C. L. *See* Hall, Osawa, and Thomasson.
Thompson, A. Y. *See* Seyedin, Thompson, Rosen, and Piez.
Thompson, G. A., Jr. *See* Einspahr, Maeda, and Thompson.
— *See* Maeda and Thompson.
— *See* Nandini-Kishore and Thompson.
Thompson, G. W. *See* Hoffman, Thompson, Griffin, and Price.
Thompson, H. A., and Spooner, B. S. Proteoglycan and glycosaminoglycan synthesis in embryonic mouse salivary glands: effects of β-D-xyloside, an inhibitor of branching morphogenesis. 96:1443.
Thompson, J. *See* Moore, Thompson, Kirkness, Dickson, and Walsh.
— *See* Turner, Thompson, Sariban-Sohraby, and Handler.
Thompson, K. *See* Argraves, Suzuki, Arai, Thompson, Pierschbacher, and Ruoslahti.
Thompson, K. L. *See* Garcia, Stoppelli, Thompson, Decker, and Rosner.
Thompson, M. M. *See* Blank, Thompson, and Owens.
— *See* Owens, Loeb, Gordon, and Thompson.
Thompson, N. L., Flanders, K. C., Smith, J. M., Ellingsworth, L. R., Roberts, A. B., and Sporn, M. B. Expression of transforming growth factor-β1 in specific cells and tissues of adult and neonatal mice. 108:661.
— *See* Flanders, Thompson, Cissel, Van Obberghen-Schilling, Baker, Kass, Ellingsworth, Roberts, and Sporn.
— *See* Heine, Munoz, Flanders, Ellingsworth, Lam, Thompson, Roberts, and Sporn.
Thompson, P. J. *See* Harlan, Thompson, Ross, and Bowen-Pope.
Thompson, T. C. *See* Neubauer, Chung, McCormick, Taguchi, Thompson, and Cunha.
Thompson, W. C., Asai, D. J., and Carney, D. H. Heterogeneity among microtubules of the cytoplasmic microtubule complex detected by a monoclonal antibody to alpha tubulin. 98:1017.
— *See* Ball, Carney, Albrecht, Asai, and Thompson.
— *See* Frost, Thompson, and Carney.
Thomson, J. N. *See* Chalfie and Thomson.
Thonar, E. J.-M. A. *See* Kuettner, Memoli, Pauli, Wrobel, Thonar, and Daniel.
Thorens, B., Roth, J., Norman, A. W., Perrelet, A., and Orci, L. Immunocytochemical localization of the vitamin D-dependent calcium binding protein in chick duodenum. 94:115.
Thorgeirsson, U. *See* Russo, Liotta, Thorgeirsson, Brundage, and Schiffmann.
Thornber, J. P. *See* Chitnis, Harel, Kohorn, Tobin, and Thornber.
— *See* Kohorn, Harel, Chitnis, Thornber, and Tobin.
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Thurman, R. G. *See* Lemasters, Stemkowski, Ji, and Thurman.
Thyberg, J. *See* Hedin, Bottger, Forsberg, Johansson, and Thyberg.
— *See* Sjölund, Hedin, Sejersen, Heldin, and Thyberg.
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Tidball, J. G., O'Halloran, T., and Burridge, K. Talin at myotendinous junctions. 103:1465.
Tiercy, J.-M., and Shooter, E. M. Early changes in the synthesis of nuclear and cytoplasmic proteins are induced by nerve growth factor in differentiating rat PC12 cells. 103:2367.
Tierney, N. *See* Tseng, Hatchell, Tierney, Huang, and Sun.
Tietze, C., Schlesinger, P., and Stahl, P. Mannose-specific endocytosis receptor of alveolar macrophages: demonstration of two functionally distinct intracellular pools of receptor and their roles in receptor recycling. 92:417.
Tiggemann, R. *See* Plattner, Westphal, and Tiggemann.
Tilly, B. C. *See* Defize, Boonstra, Meisenhelder, Kruijer, Tertoolen, Tilly, Hunter, van Bergen en Henegouwen, Moolenaar, and de Laat.
Tilney, L. G., Bonder, E. M., Coluccio, L. M., and Mooseker, M. S. Actin from *Thyone* sperm assembles on only one end of an actin filament: a behavior regulated by profilin. 97:112.

—, **Bonder, E. M., and DeRosier, D. J.** Actin filaments elongate from their membrane-associated ends. 90:485.
—, **DeRosier, D. J., and Mulroy, M. J.** The organization of actin filaments in the stereocilia of cochlear hair cells. 86:244.
—, **Egelman, E. H., DeRosier, D. J., and Saunders, J. C.** Actin filaments, stereocilia, and hair cells of the bird cochlea. II. Packing of actin filaments in the stereocilia and in the cuticular plate and what happens to the organization when the stereocilia are bent. 96:822.
—, **Fukui, Y., and DeRosier, D. J.** Movement of the actin filament bundle in *Mytilus* sperm: a new mechanism is proposed. 104:981.
—, **and Inoué, S.** Acrosomal reaction of *Thyone* sperm. II. The kinetics and possible mechanism of acrosomal process elongation. 93:820.
—, **and Inoué, S.** Acrosomal reaction of *Thyone* sperm. III. The relationship between actin assembly and water influx during the extension of the acrosomal process. 100:1273.
—, **and Inoué, S.** Flagellar gyration and midpiece rotation during extension of the acrosomal process of *Thyone* sperm: how and why this occurs. 104:407.
—, **and Jaffe, L. A.** Actin, microvilli, and the fertilization cone of sea urchin eggs. 87:771.
—, **and Portnoy, D. A.** Actin filaments and the growth, movements, and spread of the intracellular bacterial parasite, *Listeria monocytogenes*. 109:1597.
—, **and Saunders, J. C.** Actin filaments, stereocilia, and hair cells of the bird cochlea. I. Length, number, width, and distribution of stereocilia of each hair cell are related to the position of the hair cell on the cochlea. 96:807.
—, **and Tilney, M. S.** The actin filament content of hair cells of the bird cochlea is nearly constant even though the length, width, and number of stereocilia vary depending on the hair cell location. 107:2563.
—, **Tilney, M. S., and Cotanche, D. A.** Actin filaments, stereocilia, and hair cells of the bird cochlea. V. How the staircase pattern of stereociliary lengths is generated. 106:355.
— *See* Bullitt, DeRosier, Coluccio, and Tilney.
— *See* Coluccio and Tilney.
— *See* DeRosier and Tilney.
— *See* DeRosier, Tilney, Bonder, and Frankl.
— *See* Hirokawa and Tilney.
— *See* Hirokawa, Tilney, Fujiwara, and Heuser.
— *See* Inoué and Tilney.
— *See* Tilney, Tilney, Stephens, Merte, Drenckhahn, Cotanche, and Bretscher.
Tilney, M. S., Tilney, L. G., Stephens, R. E., Merte, C., Drenckhahn, D., Cotanche, D. A., and Bretscher, A. Preliminary biochemical characterization of the stereocilia and cuticular plate of hair cells of the chick cochlea. 109:1711.
— *See* Tilney and Tilney.
— *See* Tilney, Tilney, and Cotanche.
Timpl, R. *See* Acheson, Edgar, Timpl, and Thoenen.
— *See* Aumailley and Timpl.
— *See* Bruns, Press Engvall, Timpl, and Gross.
— *See* Carey, Eldridge, Cornbrooks, Timpl, and Bunge.
— *See* Couchman, Höök, Rees, and Timpl.
— *See* Edgar, Timpl, and Thoenen.
— *See* Ekblom, Lehtonen, Saxen, and Timpl.
— *See* Johansson, Kjellen, Höök, and Timpl.
— *See* Rovasio, Delouvée, Yamada, Timpl, and Thiery.
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Tippit, D. H., Pickett-Heaps, J. D., and Leslie, R. Cell division in two large pennate diatoms *Hantzschia* and *Nitzschia*. III. A new proposal for kinetochore function during prometaphase. 86:402.
—, **Pillus, L., and Pickett-Heaps, J.** Organization of spindle microtubules in *Ochromonas danica*. 87:531.
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— *See* Chitnis, Harel, Kohorn, Tobin, and Thornber.
— *See* Kohorn, Harel, Chitnis, Thornber, and Tobin.
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Tobler, M. *See* Frochner, Murnane, Tobler, Peng, and Sealock.
Toda, K.-I., Taun, T.-L., Brown, P. J., and Grinnell, F. Fibronectin receptors of human keratinocytes and their expression during cell culture. 105:3097.
Toda, T. *See* Hirano, Konoha, Toda, and Yanagida.
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— *See* Carey, Todd, and Rafferty.
— *See* Mehta, Orphe, Todd, Cornbrooks, and Carey.
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— Visualization of longitudinally oriented intermediate filaments in frozen sections of chicken cardiac muscle by a new staining method. 97:562.
—, **Dutton, A. H., and Singer, S. J.** Immunoelectron microscopic studies of desmin (skeletin) localization and intermediate filament organization in chicken cardiac muscle. 96:1736.
—, **Dutton, A. H., and Singer, S. J.** Immunoelectron microscopic studies of desmin (skeletin) localization and intermediate filament organization in chicken skeletal muscle. 96:1727.
—, **and Maher, P. A.** Immunocytochemical studies of cardiac myofibrillogenesis in early chick embryos. I. Presence of immunofluorescent titin spots in the premyofibril stages. 105:2781.
—, **and Maher, P. A.** Immunocytochemical studies of cardiac myofibrillogenesis in early chick embryos. II. Generation of α-actinin dots within titin spots at the time of the first myofibril formation. 105:2795.
—, **Maher, P. A., and Singer, S. J.** Distributions of vimentin and desmin in developing chick myotubes in vivo. I. Immunofluorescence study. 98:1961.
—, **Maher, P. A., and Singer, S. J.** Distributions of vimentin and desmin in developing chick myotubes in vivo. II. Immunoelectron microscopic study. 100:1157.
— *See* Geiger, Dutton, Tokuyasu, and Singer.
— *See* Jorgensen, Shen, MacLennan, and Tokuyasu.
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Tolley, J. O. *See* Jesaitis, Bokoch, Tolley, and Allen.
— *See* Jesaitis, Tolley, Bokoch, and Allen.
Tomasek, J. J., and Hay, E. D. Analysis of the role of microfilaments and microtubules in acquisition of bipolarity and elongation of fibroblasts in hydrated collagen gels. 99:536.
Tomaselli, K. J., Damsky, C. H., and Reichardt, L. F. Interactions of a neuronal cell line (PC12) with laminin, collagen IV, and fibronectin: identification of integrin-related glycoproteins involved in attachment and process outgrowth. 105:2347.
—, **Damsky, C. H., and Reichardt, L. F.** Purification and characterization of mammalian integrin expressed by a rat neuronal cell line (PC12): evidence that they function as α/β heterodimeric receptors for laminin and type IV collagen. 107:1241.
—, **Reichardt, L. F., and Bixby, J. L.** Distinct molecular interactions mediate neuronal process outgrowth on non-neuronal cell surfaces and extracellular matrices. 103:2659.
— *See* Neugebauer, Tomaselli, Lilien, and Reichardt.
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— *See* Van Deurs, Tønnessen, Petersen, Sandvig, and Olsnes.
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— *See* Knudson and Toole.
— *See* Mikuni-Takagaki and Toole.
— *See* Orkin and Toole.
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—, **and Burke, B.** Accumulation of adrenocorticotropin secretory granules in the midbody of telophase AtT20 cells: evidence that secretory

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—, **Hollinshead, M., Frank, R., and Burke, B.** An antibody specific for an endoproteolytic cleavage site provides evidence that pro-opiomelanocortin is packaged into secretory granules in AtT20 cells before its cleavage. 105:155.
—, **Kern, H. F., Fuller, S. D., and Howell, K. E.** Condensation-sorting events in the rough endoplasmic reticulum of exocrine pancreatic cells. 109:35.
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—, **Tooze, S. A., and Fuller, S. D.** Sorting of progeny coronavirus from condensed secretory proteins at the exit of the *trans*-Golgi network of AtT20 cells. 105:1215.
— *See* Tooze, Tooze, and Warren.
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— *See* Tooze and Tooze.
— *See* Tooze, Tooze, and Fuller.
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—, **Lotti, L. V., Pavan, A., Migliaccio, G., and Bonatti, S.** Free diffusion to and from the inner nuclear membrane of newly synthesized plasma membrane glycoproteins. 104:733.
—, **and Pinto da Silva, P.** Compartmentalization of intracellular membrane glycocomponents is revealed by fracture-label. 98:29.
— *See* Da Silva, Torrisi, and Kachar.
— *See* Pinto da Silva and Torrisi.
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— *See* Haimann, Torri-Tarelli, Fesce, and Ceccarelli.
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—, **Louvard, D., Picart, R., and Tixier-Vidal, A.** The rough endoplasmic reticulum and the Golgi apparatus visualized using specific antibodies in normal and tumoral prolactin cells in culture. 96:1197.
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Townes-Anderson, E., MacLeish, P. R., and Raviola, E. Rod cells dissociated from mature salamander retina: ultrastructure and uptake of horseradish peroxidase. 100:175.
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— *See* Toyama and Toyama.
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— Chymotryptic digestion of *Tetrahymena* ciliary dynein. II. Pathway of the degradation of 22S dynein heavy chains. 105:897.
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Trahair, J. F., Neutra, M. R., and Gordon, J. I. Use of transgenic mice to study the routing of secretory proteins in intestinal epithelial cells: analysis of human growth hormone compartmentalization as a function of cell type and differentiation. 109:3231.
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Tranter, M. P., Sugrue, S. P., and Schwartz, M. A. Evidence for a direct, nucleotide-sensitive interaction between actin and liver cell membranes. 109:2833.
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— *See* Bhakdi and Tranum-Jensen.
— *See* Fussle, Bhakdi, Sziegoleit, Tranum-Jensen, Kranz, and Wellensiek.
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—, **Andrews, S. B., Cootauco, C., and Quarles, R.** The myelin-associated glycoprotein is enriched in multivesicular bodies and periaxonal membranes of actively myelinating oligodendrocytes. 109:2417.
—, **Itoyama, Y., Sternberger, N. H., Quarles, R. H., and Webster, H. D.** Immunocytochemical localization of P_0 protein in Golgi complex membranes and myelin of developing rat Schwann cells. 90:1.
—, **and Quarles, R. H.** Presence of the myelin-associated glycoprotein correlates with alterations in the periodicity of peripheral myelin. 92:877.
—, **Quarles, R. H., and Griffin J. W.** Myelin-associated glycoprotein and myelinating Schwann cell-axon interaction in chronic B,B′-iminodipropionitrile neuropathy. 98:1272.
—, **Quarles, R. H., and Suzuki, K.** Immunocytochemical studies of quaking mice support a role for the myelin-associated glycoprotein in forming and maintaining the periaxonal space and periaxonal cytoplasmic collar of myelinating Schwann cells. 99:594.
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— *See* Dermietzel, Yancey, Traub, Willecke, and Revel.
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—, **Kenealy, J. F. X., and Allen, R. D.** Studies of the motility of Foraminifera. II. The dynamic microtubular cytoskeleton on the reticulopodial network of *Allogromia laticollaris*. 97:1668.
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Trifaró, J.-M. *See* Bader, Trifaró, Langley, Thiersé, and Aunis.
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—, **Cluzeaud, F., Pfeiffer, F., Betz, H., and Korn, H.** Distribution of glycine receptors at central synapses: an immunoelectron microscopy study. 101:683.
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— *See* Vacquier, Moy, Trimmer, Ebina, and Porter.
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Trüeb, B., Lewis, J. B., and Carter, W. G. Translatable mRNA for GP140 (a subunit of type VI collagen) is absent in SV40 transformed fibroblasts. 100:638.
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—, **and Henry, L.** Monoclonal antibodies detect and stabilize conformational states of smooth muscle myosin. 109:2879.
—, **and Lowey, S.** Assembly of smooth muscle myosin minifilaments: effects of phosphorylation and nucleotide binding. 105:2811.
—, **and Lowey, S.** Subunit exchange between smooth muscle myosin filaments. 105:3021.
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— *See* Sargent, Hedges, Tsavaler, Clemmons, Tzartos, and Lindstrom.
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—, **Runge, M. S., Cooper, J. A., Williams, R. C., Jr., and Pollard, T. D.** Physical, immunochemical and functional properties of *Acanthamoeba* profilin. 98:214.
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—, **Savion, N., Gospodarowicz, D., and Stern, R.** Modulation of collagen synthesis by a growth factor and by the extracellular matrix: comparison of celiular response to two different stimuli. 97:803.
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— *See* Pozzan, Arslan, Tsien, and Rink.
— *See* Rink, Tsien, and Pozzan.
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— *See* Charonis, Tsilibary, Yurcheno, and Furthmayr.
— *See* Herbst, McCarthy, Tsilibary, and Furcht.
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—, **and Ishikawa, H.** The movement of membranous organelles in axons. Electron microscopic identification of anterogradely and retrogradely transported organelles. 84:513.
—, **Ishikawa, H., and Kurokawa, M.** Isolation of 10-nm filaments from astrocytes in the mouse optic nerve. 88:245.
—, **Itoh, M., and Tsukita, S.** A new 400-kD protein from isolated adherens junctions: its localization at the undercoat of adherens junctions and at microfilament bundles such as stress fibers and circumferential bundles. 109:2905.
—, **and Tsukita, S.** Desmocalmin: a calmodulin-binding high molecular weight protein isolated from desmosomes. 101:2070.
—, **and Tsukita, S.** Isolation of cell-to-cell adherens junctions from rat liver. 108:31.
—, **Tsukita, S., and Ishikawa, H.** Bidirectional polymerization of G-actin on the human erythrocyte membrane. 98:1102.
—, **Tsukita, S., and Ishikawa, H.** Cytoskeletal network underlying the human erythrocyte membrane. Thin-section electron microscopy. 85:567.
—, **Tsukita, S., Ishikawa, H., Kurokawa, M., Morimoto, K., Sobue, K., and Kakiuchi, S.** Binding sites of calmodulin and actin on the brain spectrin, calspectin. 97:574.
—, **Tsukita, S., Ishikawa, H., Sato, S., and Nakao, M.** Electron microscopic study of reassociation of spectrin and actin with the human erythrocyte membrane. 90:70.
—, **Tsukita, S., Kobayashi, T., and Matsumoto, G.** Subaxolemmal cytoskeleton in squid giant axon. II. Morphological identification of microtubule- and microfilament-associated domains of axolemma. 102:1710.
—, **Tsukita, S., and Matsumoto, G.** Light-induced structural changes of cytoskeleton in squid photoreceptor microvilli detected by rapid-freeze method. 106:1151.
—, **Tsukita, S., Usukura, J., and Ishikawa, H.** ATP-dependent structural changes of the outer dynein arm in *Tetrahymena* cilia: a freeze-etch replica study. 96:1480.
— *See* Hieda, Tsukita, and Tsukita.
— *See* Mabuchi, Hamaguchi, Kobayashi, Hosoya, Tsukita, and Tsukita.
— *See* Tsukita, Hieda, and Tsukita.
— *See* Tsukita, Itoh, and Tsukita.
— *See* Tsukita and Tsukita.
— *See* Tsukita, Tsukita, and Ishikawa.
— *See* Tsukita, Tsukita, Ishikawa, Kurokawa, Morimoto, Sobue, and Kakiuchi.
— *See* Tsukita, Tsukita, Ishikawa, Sato, and Nakao.
— *See* Tsukita, Tsukita, Kobayashi, and Matsumoto.
— *See* Tsukita, Tsukita, and Matsumoto.
— *See* Tsukita, Tsukita, Usukura, and Ishikawa.
T.-T. Sun. *See* O'Guin, Manabe, and T.-T. Sun.
Tucker, A. M. *See* Madri, Pratt, and Tucker.
Tucker, G. C. *See* Boyer, Tucker, Vallés, Franke, and Thiery.
Tucker, J. B., Mathews, S. A., Hendry, K. A. K., Mackie, J. B., and Roche, D. L. J. Spindle microtubule differentiation and deployment during micronuclear mitosis in *Paramecium*. 101:1966.
— *See* Mogensen, Tucker, and Stebbings.
Tufaro, F., Snider, M. D., and McKnight, S. L. Identification and characterization of a mouse cell mutant defective in the intracellular transport of glycoproteins. 105:647.
Tulsiani, D. P. *See* Novikoff, Touster, Novikoff, and Tulsiani.
Tulsiani, D. R. P., Skudlarek, M. D., and Orgebin-Crist, M.-C. Novel α-D-mannosidase of rat sperm plasma membranes: characterization and potential role in sperm-egg interactions. 109:1257.
Tung, P. S. *See* Skinner, Tung, and Fritz.
Tuohimaa, P. *See* Gasc, Renoir, Radanyiu, Joab, Tuohimaa, and Baulieu.
Turkewitz, A. P., and Harrison, S. C. Concentration of transferrin receptor in human placental coated vesicles. 108:2127.
Turner, J. N. *See* Shain, Forman, Madelian, and Turner.
Turner, J. R., and Tartakoff, A. M. The response of the Golgi complex to microtubule alterations: the roles of metabolic energy and membrane traffic in Golgi complex organization. 109:2081.
Turner, J. T. *See* Johnson, Dawson, Turner, and Wyche.
Turner, P. F., and Margolis, R. L. Taxol-induced bundling of brain-derived microtubules. 99:940.
Turner, P. R., Jaffe, L. A., and Fein, A. Regulation of cortical vesicle exocytosis in sea urchin eggs by inositol 1,4,5-triphosphate and GTP-binding protein. 102:70.
Turner, R. J., Thompson, J., Sariban-Sohraby, S., and Handler, J. S. Monoclonal antibodies as probes of epithelial membrane polarization. 101:2173.
Twardzik, D. R. *See* Myrdal, Twardzik, and Auersperg.
Twiggs, L. B. *See* Okagaki, Clark, and Twiggs.
Tycko, B., Keith, C. H., and Maxfield, F. R. Rapid acidification of endocytic vesicles containing asialoglycoprotein in cells of a human hepatoma line. 97:1762.
Tyler, J. *See* Hartwig, Tyler, and Stossel.
Tyler, J. M., Anderson, J. M., and Branton, D. Structural comparison of several actin-binding macromolecules. 85:489.
Tynan, W. *See* Shelly, Tynan, Schmid, Schutz, and Yeoh.
Tyndall, C. *See* Poruchynsky, Tyndall, Both, Sato, Bellamy, and Atkinson.
Tyner, A. L., and Fuchs, E. Evidence for posttranscriptional regulation of the keratins expressed during hyperproliferation and malignant transformation in human epidermis. 103:1945.
Tytell, M. *See* Brady, Tytell, Heriot, and Lasek.
— *See* Brady, Tytell, and Lasek.
Tzartos, S. *See* Sargent, Hedges, Tsavaler, Clemmons, Tzartos, and Lindstrom.

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Uchida, N. *See* Ledger, Uchida, and Tanzer.
Uchida, T. *See* Kaneda, Uchida, Mekada, Nakanishi, and Okada.
— *See* Mekada, Okada, and Uchida.
— *See* Wataya-Kaneda, Kaneda, Sakurai, Sugawa, and Uchida.

Uddin, M., Altmann, G. G., and Leblond, C. P. Radioautographic visualization of differences in the pattern of [^{3}H]uridine and [^{3}H]orotic acid incorporation into the RNA of migrating columnar cells in rat small intestine. 98:1619.
Uehara, Y. *See* Kondo, Watanabe, Sasaki, Uehara, and Oishi.
Ueno, H., Perryman, M. B., Roberts, R., and Schneider, M. D. Differentiation of cardiac myocytes after mitogen withdrawal exhibits three sequential states of the ventricular growth response. 107:1911.
Ueno, T., and Korn, E. D. Isolation and partial characterization of a 110-kD dimer actin-binding protein. 103:621.
Uhing, R. J. *See* Prpic, Uhing, Weiel, Jakoi, Gawdi, Herman, and Adams.
Uhlenbruck, G. *See* Gramzow, Bachmann, Uhlenbruck, Dorn, and Müller.
Uitto, J. *See* Bunge, Williams, Wood, Uitto, and Jeffrey.
— *See* Rifas, Uitto, Memoli, Kuettner, Henry, and Peck.
Uitto, J. J. *See* Jaakkola, Peltonen, and Uitto.
Ukkonen, P. *See* Mellman, Plutner, and Ukkonen.
Ulrich, R. G. *See* Spearman, Hurley, Olivas, Ulrich, and Butcher.
Umazume, Y. *See* Maruyama, Sawada, Kimura, Ohashi, Higuchi, and Umazume.
Unanue, E. R. *See* Amato, Unanue, and Taylor.
Underdown, B. J. *See* Schiff, Fisher, Jones, and Underdown.
— *See* Schiff, Fisher, and Underdown.
Underhill, C. B. *See* Alho and Underhill.
— *See* Lacy and Underhill.
Unemori, E. N., and Werb, Z. Reorganization of polymerized actin: a possible trigger for induction of procollagenase in fibroblasts cultured in and on collagen gels. 103:1021.
Ungar, F., Piscopo, I., Letizia, J., and Holtzman, E. Uptake of calcium by the endoplasmic reticulum of the frog photoreceptor. 98:1645.
Unger, E. *See* Rubino, Fighetti, Unger, and Cappuccinelli.
— *See* Stow, Kjéllen, Unger, Höök, and Farquhar.
Uni, S. *See* Howard, Lyon, Uni, Saul, Aley, Klotz, Panton, Sherwood, Marsh, Aikawa, and Rock.
— *See* Howard, Uni, Aikawa, Aley, Leech, Lew, Wellems, Rener, and Taylor.
Unkeless, J. C. *See* Mellman, Steinman, Unkeless, and Cohn.
— *See* Mellman, Plutner, Steinman, Unkeless, and Cohn.
Uno, I., Matsumoto, K., Hirata, A., and Ishikawa, T. Outer plaque assembly and spore encapsulation are defective during sporulation of adenylate cyclase-deficient mutants of *Saccharomyces cerevisiae*. 100:1854.
Unwin, N., Toyoshima, C., and Kubalek, E. Arrangement of the acetylcholine receptor subunits in the resting and desensitized states, determined by cryoelectron microscopy of crystallized *Torpedo* postsynaptic membranes. 107:1123.
— *See* Kubalek, Ralston, Lindstrom, and Unwin.
Unwin, P. N. T., and Ennis, P. D. Calcium-mediated changes in gap junction structure: evidence from the low angle x-ray pattern. 97:1459.
—, and Milligan, R. A. A large particle associated with the perimeter of the nuclear pore complex. 93:63.
— *See* Brisson and Unwin.
— *See* Lyon and Unwin.
— *See* Milligan and Unwin.
Urban, J., Parczyk, K., Leutz, A., Kayne, M., and Kondor-Koch, C. Constitutive apical secretion of an 80-kD sulfated glycoprotein complex in the polarized epithelial Madin-Darby canine kidney cell line. 105:2735.
Urbani, L. J. *See* Rothman, Miller, and Urbani.
— *See* Rothman, Urbani, and Brands.
Urban-Pickering, M. *See* Wagner, Mayadas, Urban-Pickering, Lewis, and Marder.
Urry, D. W. *See* Senior, Griffin, Mecham, Wrenn, Prasad, and Urry.
Urry, L. A. *See* Hynes, Marcantonio, Stepp, Urry, and Yee.
Usdin, T. B., and Fischbach, G. D. Purification and characterization of a polypeptide from chick brain that promotes the accumulation of acetylcholine receptors in chick myotubes. 103:493.
Uster, P. S., and Pagano, R. E. Resonance energy transfer microscopy: observations of membrane-bound fluorescent probes in model membranes and in living cells. 103:1221.
Usukura, J. *See* Tsukita, Tsukita, Usukura, and Ishikawa.
Uyeda, T. Q. P., and Furuya, M. Evidence for active interactions between microfilaments and microtubules in myxomycete flagellates. 108:1727.

V

Vaccaro, C. A., and Brody, J. S. Structural features of alveolar wall basement membrane in the adult rat lung. 91:427.
— *See* Brody, Vaccaro, Gill, and Silbert.
— *See* Kagan, Vaccaro, Bronson, Tang, and Brody.
Vacquier, V. D., Moy, G. W., Trimmer, J. S., Ebina, Y., and Porter, D. C. Monoclonal antibodies to a membrane glycoprotein induce the phosphorylation of histone H1 in sea urchin spermatozoa. 107:2021.
— *See* Glabe, Grabel, Vacquier, and Rosen.
— *See* Kopf, Moy, and Vacquier.
— *See* Podell and Vacquier.
— *See* Trimmer, Ebina, Schackmann, Meinhof, and Vacquier.
— *See* Ward, Brokaw, Garbers, and Vacquier.
— *See* Ward, Moy, and Vacquier.
Vadas, M. A. *See* Burns, Lucas, Krissansen, Werkmeister, Scanlon, Simpson, and Vadas.
Vaheri, A. *See* Hedman, Christner, Julkunen, and Vaheri.
— *See* Kuismanen, Myllylä, Kiistala, Asko-Seljavaara, and Vaheri.
— *See* Liesi, Dahl, and Vaheri.
— *See* Pöllänen, Saksela, Salonen, Andreasen, Nielsen, Danø, and Vaheri.
— *See* Pöllanen, Hedman, Nielson, Danø, and Vaheri.
— *See* Stephens, Pöllanen, Tapiovaara, Leung, Sim, Salonen, Rønne, Behrendt, Danø, and Vaheri.
Vahey, M. A 72,000 molecular weight protein from tomato inhibits rabbit Acto-S-1 ATPase activity. 96:1761.
— *See* Condeelis and Vahey.
— *See* Schneider, Sellers, Vahey, Preston, and Adelstein.
Vainio, S., Jalkanen, M., and Thesleff, I. Syndecan and tenascin expression is induced by epithelial-mesenchymal interactions in embryonic tooth mesenchyme. 108:1945.
Valberg, P. A., and Albertini, D. F. Cytoplasmic motions, rheology, and structure probed by a novel magnetic particle method. 101:130.
— *See* Zaner and Valberg.
Valdivia, M. M., and Brinkley, B. R. Fractionation and initial characterization of the kinetochore from mammalian metaphase chromosomes. 101:1124.
Vale, R. D., and Hotani, H. Formation of membrane networks in vitro by kinesin-driven microtubule movement. 107:2233.
—, and Shooter, E. M. Alteration of binding properties and cytoskeletal attachment of nerve growth factor receptors in PC12 cells by wheat germ agglutinin. 94:710.
—, and Toyoshima, Y. Y. Microtubule translocation properties of intact and proteolytically digested dyneins from *Tetrahymena cilia*. 108:2327.
Valgeirsdottir, K. *See* Saide, Chin-Bow, Hogan-Sheldon, Busquets-Turner, Vigoreaux, Valgeirsdottir, and Pardue.
Valkirs, G. E., and Feher, G. Topography of reaction center subunits in the membrane of the photosynthetic bacterium, *Rhodopseudomonas sphaeroides*. 95:179.
Valle, G. *See* Colman, Morser, Lane, Besley, Wylie, and Valle.
Vallee, R. B. A taxol-dependent procedure for the isolation of microtubules and microtubule-associated proteins. 92:435.
—, DiBartolomeis, M. J., and Theurkauf, W. E. A protein kinase bound to the projection portion of MAP 2 (microtubule-associated protein 2). 90:568.
— *See* Bloom, Luca, and Vallee.
— *See* Bloom, Schoenfeld, and Vallee.
— *See* Bloom and Vallee.
— *See* Collins and Vallee.
— *See* Hirokawa, Bloom, and Vallee.
— *See* Paschal, Shpetner, and Vallee.
— *See* Shpetner, Paschal, and Vallee.
Vallés, A. M. *See* Boyer, Tucker, Vallés, Franke, and Thiery.
Valtorta, F., Jahn, R., Fesce, R., Greengard, P., and Ceccarelli, B. Synaptophysin (p38) at the frog neuromuscular junction: its incorporation into the axolemma and recycling after intense quantal secretion. 107:2719.
—, Madeddu, L., Meldolesi, J., and Ceccarelli, B. Specific localization of the α-latrotoxin receptor in the nerve terminal plasma membrane. 99:124.
— *See* Bähler, Benfenati, Valtorta, Czernik, and Greengard.
van Adelsberg, J., and Al-Awqati, Q. Regulation of cell pH by Ca^{+2}-mediated exocytotic insertion of H^+-ATPases. 102:1638.
Vanaman, T. C. *See* Blum, Hayes, Jamieson, and Vanaman.
van Bergen en Henegouwen, P. M. P. *See* Defize, Boonstra, Meisenhelder, Kruijer, Tertoolen, Tilly, Hunter, van Bergen en Henegouwen, Moolenaar, and de Laat.
van Berkel, T. J. C. *See* Amar-Costesec, Prado-Figueroa, Beaufay, Nagelkerke, and van Berkel.
van Blerkom, J. *See* Schliwa and van Blerkom.
van Boom, J. H. *See* Neefjes, Verkerk, Broxterman, van der Marel, van Boom, and Ploegh.
Vance, B. A., Kowalski, C. G., and Brinckerhoff, C. E. Heat shock of rabbit synovial fibroblasts increases expression of mRNAs for two metalloproteinases, collagenase and stromelysin. 107:2037.
Vance, P. M. *See* Galvin, Vance, Dixit, Fink, and Frazier.

van Deenen, L. L. M. *See* Christiansson, Kuypers, Roelofsen, Op den Kamp, and van Deenen.
— *See* Kuypers, Roelofsen, Berendsen, Op den Kamp, and van Deenen.
van de Kemp, A. *See* Pieper, Schaart, Krimpenfort, Henderik, Moshage, van de Kemp, Ramaekers, Berns, and Bloemendal.
Vandekerckhove, J. *See* Ankenbauer, Kleinschmidt, Vandekerckhove, and Franke.
— *See* Arpin, Pringault, Finidori, Garcia, Jeltsch, Vandekerckhove, and Louvard.
— *See* Franke, Schmid, Vandekerckhove, and Weber.
— *See* Hinssen, Vandekerckhove, and Lazarides.
Vandekerckhove, J. S., Kaiser, D. A., and Pollard, T. D. *Acanthamoeba* actin and profilin can be cross-linked between glumatic acid 364 of actin and lysine 115 of profilin. 109:619.
Vandekerkhove, J. *See* Garcia, Coudrier, Carboni, Anderson, Vandekerkhove, Mooseker, Louvard, and Arpin.
Van den Berg, E. *See* Medcalf, Van den Berg, and Schleuning.
Van Den Berghe, H. *See* David, Lories, Heremans, Van Der Schueren, Cassiman, and Van Den Berghe.
— *See* Heremans, Van Der Schueren, De Cock, Paulsson, Cassiman, Van Den Berghe, and David.
van den Ende, H. *See* Homan, Musgrave, de Nobel, Wagter, de Wit, Kolk, and van den Ende.
— *See* Kooijman, de Wildt, Beumer, van der Vliet, Homan, Kalshoven, Musgrave, and van den Ende.
van den Pol, A. N., di Porzio, U., and Rutishauser, U. Growth cone localization of neural cell adhesion molecule on central nervous system neurons in vitro. 102:2281.
Vanderburg, C. R., and Nathanson, M. A. Posttranscriptional control of embryonic rat skeletal muscle protein synthesis. Control at the level of translation by endogenous RNA. 107:1085.
Van der Heijden, P. R. *See* Van Haastert and Van der Heijden.
Vanderkooi, J. M., Maniara, G., and Erecinska, M. Mobility of fluorescent derivatives of cytochrome *c* in mitochondria. 100:435.
Van Der Leÿ, I. *See* Distel, Van Der Leÿ, Veenhuis, and Tabak.
van der Ley, P. A. *See* Geuze, Slot, van der Ley, and Scheffer.
van der Marel, G. A. *See* Neefjes, Verkerk, Broxterman, van der Marel, van Bodm, and Ploegh.
van der Mark, K. *See* Mauch, van der Mark, Helle, Mollenhauer, Pfäffle, and Krieg.
van der Meer, J. W. M. *See* Burger, van der Meer, and Nijweide.
Vanderoef, R. *See* Miller, Feuer, Vanderoef, and Lenard.
van der Plas, A. *See* Nijweide, van Iperen-van Gent, Kawilarang-de Haas, van der Plas, and Wassenaar.
van der Rest, M. *See* Ecarot-Charrier, Glorieux, van der Rest, and Pereira.
— *See* Sugrue, Gordon, Seyer, Dublet, van der Rest, and Olsen.
van der Saag, P. T. *See* Boonstra, Moolenaar, Harrison, Moed, van der Saag, and de Laat.
— *See* de Laat, Tertoolen, van der Saag, and Bluemink.
Van Der Schueren, B. *See* David, Lories, Heremans, Van Der Schueren, Cassiman, and Van Den Berghe.
— *See* Heremans, Van Der Schueren, De Cock, Paulsson, Cassiman, Van Den Berghe, and David.
van der Vliet, G. *See* Kooijman, de Wildt, Beumer, van der Vliet, Homan, Kalshoven, Musgrave, and van den Ende.
Van Deurs, B., and Behnke, O. Membrane structure of nonactivated and activated human blood platelets as revealed by freeze-fracture: Evidence for particle redistribution during platelet contraction. 87:209.
—, **and Nilausen, K.** Pinocytosis in mouse L-fibroblasts: ultrastructural evidence for a direct membrane shuttle between the plasma membrane and the lysosomal compartment. 94:279.
—, **Von Bulow, F., and Moller, M.** Vesicular transport of cationized ferritin by the epithelium of the rat choroid plexus. 89:131.
—, **Sandvig, K., Petersen, O. W., Olsnes, S., Simons, K., and Griffiths, G.** Estimation of the amount of internalized ricin that reaches the *trans*-Golgi network. 106:253.
—, **Tønnessen, T. I., Petersen, O. W., Sandvig, K., and Olsnes, S.** Routing of internalized ricin and ricin conjugates to the Golgi complex. 102:37.
— *See* Petersen and Van Deurs.
— *See* Sandvig, Olsnes, Brown, Petersen, and Van Deurs.
— *See* Sandvig, Olsnes, Petersen, and Van Deurs.
Vandewalle, A., Köpfer-Hobelsberger, B., and Heidrich, H.-G. Cortical cell populations from rabbit kidney isolated by free-flow electrophoresis: characterization by measurement of hormone-sensitive adenylate cyclase. 92:505.
Van De Water, L., Schroeder, C., Crenshaw, E. B., and Hynes, R. O. Phagocytosis of gelatin-latex particles by a murine macrophage line is dependent on fibronectin and heparin. 90:32.
— *See* ffrench-Constant, Van De Water, Dvorak, and Hynes.
van Eekelen, C. A. G., van Venrooij, W. J. hnRNA and its attachment to a nuclear protein matrix. 88:554.
Van Eldick, L. J. *See* Burgess, Watterson, and Van Eldick.
Van Eldik, L. J. *See* Vantard, Lambert, De Mey, Picquot, and Van Eldik.
— *See* Winningham-Major, Staecker, Barger, Coats, and Van Eldik.
— *See* Zimmer and Van Eldik.
van Furth, R. *See* Ince, Coremans, Ypey, Leijh, Verveen, and van Furth.
— *See* Ince, Ypey, van Furth, and Verveen.
Van Haastert, P. J. M. Differential effects of temperature of cAMP-induced excitation, adaptation, and deadaptation of adenylate and guanylate cyclase in *Dictyostelium discoideum*. 105:2301.
— Sensory adaptation of *Dictyostelium discoideum* cells to chemotactic signals. 96:1559.
—, **and Van der Heijden, P. R.** Excitation, adaptation, and deadaptation of the cAMP-mediated cGMP response in *Dictyostelium discoideum*. 96:347.
—, **and Van Lookeren Campagne, M. M.** Transient kinetics of a cGMP-dependent cGMP-specific phosphodiesterase from *Dictyostelium discoideum*. 98:709.
—, **Van Walsum, H., and Pasveer, F. J.** Non-equilibrium kinetics of a cyclic GMP-binding protein in *Dictyostelium discoideum*. 94:271.
— *See* Kesbeke, Snaar-Jagalska, and Van Haastert.
Van Hooff, C. O. M., Holthuis, J. C. M., Oestreicher, A. B., Boonstra, J., De Graan, P. N. E., and Gispen, W. H. Nerve growth factor-induced changes in the intracellular localization of the protein kinase C substrate B-50 in pheochromocytoma PC12 cells. 108:1115.
van Iperen-van Gent, A. S. *See* Nijweide, van Iperen-van Gent, Kawilarang-de Haas, van der Plas, and Wassenaar.
Van Itallie, C. M. *See* Anderson, Van Itallie, Peterson, Stevenson, Carew, and Mooseker.
Van Kampen, M. *See* Capps, Van Kampen, Ward, and Zúñiga.
van Kerkhof, P. *See* Strous, van Kerkhof, Willemsen, Geuze, and Berger.
— *See* Strous, Willemsen, van Kerkhof, Slot, Geuze, and Lodish.
Van Lookeren Campagne, M. M. *See* Van Haastert and Van Lookeren Campagne.
Van Luc, P. *See* Monier, Van Luc, Kreibich, Sabatini, and Adesnik.
van Meer, G., and Simons, K. An efficient method for introducing defined lipids into the plasma membrane of mammalian cells. 97:1365.
—, **Stelzer, E. H. K., Wijnaendts-van-Resandt, R. W., and Simons, K.** Sorting of sphingolipids in epithelial (Madin–Darby canine kidney) cells. 105:1623.
— *See* Knoll, Burger, Bron, van Meer, and Verkleij.
Van Nest, G. A., MacDonald, R. J., Raman, R. K., and Rutter, W. J. Proteins synthesized and secreted during rat pancreatic development, 86:784.
Van Obberghen, E. *See* Barazzone, Lesniak, Gorden, Van Obberghen, Carpentier, and Orci.
van Obberghen, E. *See* Carpentier, Gazzano, van Obberghen, Fehlmann, Freychet, and Orci.
Van Obberghen-Schilling, E. *See* Flanders, Thompson, Cissel, Van Obberghen-Schilling, Baker, Kass, Ellingsworth, Roberts, and Sporn.
van Raamsdonk, W. *See* Moens, Heyting, Dietrich, van Raamsdonk, and Chen.
van Renswoude, J. *See* Klausner, van Renswoude, Kempf, Rao, Bateman, and Robbins.
Van Roy, F. M. *See* Behrens, Mareel, Van Roy, and Birchmeier.
van Schaik, M. *See* Mullock, Branch, van Schaik, Gilbert, and Luzio.
Vantard, M., Lambert, A.-M., De Mey, J., Picquot, P., and Van Eldik, L. J. Characterization and immunocytochemical distribution of calmodulin in higher plant endosperm cells: localization in the mitotic apparatus. 101:488.
van Tuinen, E. *See* Payne, Baker, van Tuinen, and Schekman.
Van Tuyle, G. C., and Pavco, P. A. The rat liver mitochondrial DNA-protein complex: displaced single strands of replicative intermediates are protein-coated. 100:251.
— *See* Pavco and Van Tuyle.
van Venrooij, W. J. *See* van Eekelen and van Venrooij.
Van Walsum, H. *See* Van Haastert, Van Walsum, and Pasveer.
Van Zant, G., and Chen, B. D.-M. Erythropoietin causes down regulation of colony-stimulating factor (CSF-1) receptors on peritoneal exudate macrophages of the mouse. 97:1943.
Varkey, J. *See* Hiriyanna, Varkey, Beer, and Benbow.
Varner, H. H. *See* Hollyfield, Varner, Rayborn, Liou, and Bridges.
— *See* Jerdan, Varner, Greenberg, Horn, and Martin.
Varner, J. E. *See* Cassab and Varner.
Varnum, B., Edwards, K. B., and Soll, D. R. *Dictyostelium* amebae alter motility differently in response to increasing versus decreasing temporal gradients of cAMP. 101:1.
—, **and Soll, D. R.** Effects of cAMP on single cell motility in *Dictyostelium*.

99:1151.
— *See* Rossomando, Jahngen, Varnum, and Soll.
Varon, S. *See* Engvall, Davis, Dickerson, Ruoslahti, Varon, and Manthorpe.
— *See* Manthorpe, Engvall, Ruoslahti, Longo, Davis, and Varon.
— *See* Muir, Engvall, Varon, and Manthorpe.
Varriano-Marston, E. *See* Franzini-Armstrong, Kenney, and Varriano-Marston.
Varshavsky, A. *See* Levinger and Varshavsky.
Vartio, T. *See* Laurila, Virtanen, Lehto, Vartio, and Stenman.
Vasicek, T. J. *See* Kronenberg, Fennick, and Vasicek.
Vasile, E., Simionescu, M., and Simionescu, N. Visualization of the binding, endocytosis, and transcytosis of low density liproprotein in the arterial endothelium in situ. 96:1677.
Vasilevskaya, T. D. *See* Glukhova, Frid, Shekhonin, Vasilevskaya, Grunwald, Saginati, and Koteliansky.
Vassalli, J.-D., Baccino, D., and Belin, D. A cellular binding site for the M_r 55,000 form of the human plasminogen activator, urokinase. 100:86.
— *See* Blasi, Vassalli, and Danø.
— *See* Huarte, Belin, Bosco, Sappino, and Vassalli.
— *See* Orci, Halban, Amherdt, Ravazzola, Vassalli, and Perrelet.
— *See* Orci, Ravazzola, Amherdt, Madsen, Perrelet, Vassalli, and Anderson.
— *See* Pepper, Vassalli, Montesano, and Orci.
— *See* Sappino, Huarte, Belin, and Vassalli.
Vassalli, J. D. *See* Dayer, Vassalli, Bobbitt, Hull, Reich, and Krane.
Vassalli, P. *See* Chicheportiche, Vassalli, and Tartakoff.
— *See* Montesano, Mossaz, Ryser, Orci, and Vassalli.
— *See* Montesano, Mossaz, Vassalli, and Orci.
— *See* Montesano, Orci, and Vassalli.
— *See* Tartakoff and Vassalli.
Vassarotti, A. *See* Emr, Vassarotti, Garrett, Geller, Takeda, and Douglas.
Vaughan, D. K., Fisher, S. K., Bernstein, S. A., Hale, I. L., Linberg, K. A., and Matsumoto, B. Evidence that microtubules do not mediate opsin vesicle transport in photoreceptors. 109:3053.
Vaughan, D. W. *See* Clark, Vaughan, Aiken, and Kagan.
Vaughan, L., Mendler, M., Huber, S., Bruckner, P., Winterhalter, K. H., Irwin, M. I., and Mayne, R. D-periodic distribution of collagen type IX along cartilage fibrils. 106:991.
— *See* Mendler, Eich-Bender, Vaughan, Winterhalter, and Bruckner.
Vecchio, D. *See* Borsi, Carnemolla, Castellani, Rosellini, Vecchio, Allemanni, Chang, Taylor-Papadimitriou, Pande, and Zardi.
Veenhuis, M. *See* Distel, Van Der Leÿ, Veenhuis, and Tabak.
Vega-Salas, D. E., Salas, P. J. I., Gundersen, D., and Rodriguez-Boulan, E. Formation of the apical pole of epithelial (Madin–Darby canine kidney) cells: polarity of an apical protein is independent of tight junctions while segregation of a basolateral marker requires cell–cell interactions. 104:905.
—, **Salas, P. J. I., and Rodriguez-Boulan, E.** Exocytosis of vacuolar apical compartment (VAC): a cell–cell contact controlled mechanism for the establishment of the apical plasma membrane domain in epithelial cells. 107:1717.
—, **Salas, P. J. I., and Rodriguez-Boulan, E.** Modulation of the expression of an apical plasma membrane protein of Madin–Darby canine kidney epithelial cells: cell–cell interactions control the appearance of a novel intracellular storage compartment. 104:1249.
— *See* Salas, Misek, Vega-Salas, Gundersen, Cereijido, and Rodriguez-Boulan.
— *See* Salas, Vega-Salas, Hochman, Rodriguez-Boulan, and Edidin.
Velasco, A. *See* Vertel, Velasco, LaFrance, Walters, and Kaczman-Daniel.
Velazquez, J. M., Sonoda, S., Bugaisky, G., and Lindquist, S. Is the major *Drosophila* heat shock protein present in cells that have not been heat shocked? 96:286.
Velleca, M. A. *See* Williams, Velleca, Curry, and Rosenbaum.
Verde, P. *See* Stoppelli, Verde, Grimaldi, Locatelli, and Basi.
Verdin, E. M. *See* Maratos-Flier, Kao, Verdin, and King.
Vergara, J. *See* Robertson and Vergara.
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Verkerk, J. M. H. *See* Neefjes, Verkerk, Broxterman, van der Marel, van Boom, and Ploegh.
Verkleij, A. J. *See* Knoll, Burger, Bron, van Meer, and Verkleij.
Verkley, A. J. *See* Wiegant, Blok, Defize, Linnemans, Verkley, and Boonstra.
Verma, A. K. *See* Posner, Verma, Patel, and Bergeron.
Verma, D. P. S. *See* Rachubinski, Verma, and Bergeron.
Verner, K., and Bretscher, A. Microvillus 110K-calmodulin: effects of nucleotides on isolated cytoskeletons and the interaction of the purified complex with F-actin. 100:1455.
Vernon, R. B. *See* Sage, Vernon, Funk, Everitt, and Angello.
Ver Pault, C. *See* Joseph-Silverstein, Consigli, Lyser, and Ver Pault.
Verrall, S., and Seeds, N. W. Characterization of ^{125}I-tissue plasminogen activator binding to cerebellar granule neurons. 109:265.
Verrey, F., Schaerer, E., Zoerkler, P., Paccolat, M. P., Geering, K., Kraehenbuhl, J. P., and Rossier, B. C. Regulation by aldosterone of Na^+, K^+-ATPase mRNAs, protein synthesis, and sodium transport in cultured kidney cells. 104:1231.
Verrier, B. *See* Chambard, Verrier, Gabrion, and Mauchamp.
Versalovic, J. *See* Runyan, Versalovic, and Shur.
Vertel, B. M., Velasco, A., LaFrance, S., Walters, L., and Kaczman-Daniel, K. Precursors of chondroitin sulfate proteoglycan are segregated within a subcompartment of the chondrocyte endoplasmic reticulum. 109:1827.
— *See* Dessau, Vertel, von der Mark, and von der Mark.
Verveen, A. A. *See* Ince, Coremans, Ypey, Leijh, Verveen, and van Furth.
— *See* Ince, Ypey, van Furth, and Verveen.
Veshnock, P. J. *See* Nelson and Veshnock.
Vestweber, D., and Schatz, G. A chimeric mitochondrial precursor protein with internal disulfide bridges blocks import of authentic precursors into mitochondria and allows quantitation of import sites. 107:2037.
—, **and Schatz, G.** Mitochondria can import artificial precursor proteins containing a branched polypeptide chain or a carboxy-terminal stilbene disulfonate. 107:2045.
— *See* Boller, Vestweber, and Kemler.
— *See* Hwang, Jascur, Vestweber, Pon, and Schatz.
— *See* Pon, Moll, Vestweber, Marshallsay, and Schatz.
Via, D. P., Sramek, S., Larriba, G., and Steiner, S. Effects of sodium butyrate on the membrane glycoconjugates of murine sarcoma virus-transformed rat cells. 84:225.
— *See* Voyta, Via, Butterfield, and Zetter.
Vial, J. D. *See* Gonzalez, Garrido, and Vial.
Viamontes, G. I. *See* Green, Viamontes, and Kirk.
Vibert, P., and Castellani, L. Substructure and accessory proteins in scallop myosin filaments. 109:539.
—, **and Craig, R.** Structural changes that occur in scallop myosin filaments upon activation. 101:830.
Vicentini, L. M., Ambrosini, A., Di Virgilio, F., Pozzan, T., and Meldolesi, J. Muscarinic receptor-induced phosphoinositide hydrolysis at resting cytosolic Ca^{2+} concentration in PC12 cells. 100:1330.
— *See* Pozzan, Gatti, Dozzio, Vicentini, and Meldolesi.
Vicker, M. G., Schill, W., and Drescher, K. Chemo-attraction and chemotaxis in *Dictyostelium discoideum*: myxamoeba cannot read spatial gradients of cyclic AMP. 98:2204.
Vidali, G. *See* Pfeffer, Ferrari, Tosetti, and Vidali.
Vidrich, A. *See* Gilmartin, Mitchell, Vidrich, and Freedberg.
Vierling, E., and Alberte, R. S. Regulation of synthesis of the photo-system I reaction center. 97:1806.
Vigers, G. P. A., Coue, M., and McIntosh, J. R. Fluorescent microtubules break up under illumination. 107:1101.
Vignon, F. *See* Capony, Morisset, Barrett, Capony, Broquet, Vignon, Chambon, Louisot, and Rochefort.
Vigny, M. *See* Simon-Assman, Bouziges, Vigny, and Kedinger.
Vigoreaux, J. O. *See* Saide, Chin-Bow, Hogan-Sheldon, Busquets-Turner, Vigoreaux, Valgeirsdottir, and Pardue.
Vihko, P. *See* Lewis, Green, Marsh, Vihko, Helenius, and Mellman.
Villanueva, M. A. *See* Metcalf, Villanueva, Schindler, and Wang.
Villasante, A. *See* Lewis, Villasante, Sherline, and Cowan.
— *See* Wang, Villasante, Lewis, and Cowan.
Villiger, B., Kelley, D. G., Engleman, W., Kuhn, C., and McDonald, J. A. Human alveolar macrophage fibronectin: Synthesis, secretion, and ultrastructural localization during gelatin-coated latex particle binding. 90:711.
Vilmart-Seuwen, J., Kersken, H., Stürzl, R., and Plattner, H. ATP keeps exocytosis sites in a primed state but is not required for membrane fusion: an analysis with *Paramecium* cells in vivo and in vitro. 103:1279.
Vimr, E. R. *See* Rutishauser, Watanabe, Silver, Troy, and Vimr.
Virág, I. *See* Skene and Virág.
Virshup, D. M., and Bennett, V. Clathrin-coated vesicle assembly polypeptides: physical properties and reconstitution studies with brain membranes. 106:39.
Virtanen, I., Badley, R. A., Paasivuo, R., and Lehto, V.-P. Distinct cytoskeletal domains revealed in sperm cells. 99:1083.
—, **Ekblom, P., and Laurila, P.** Subcellular compartmentalization of saccharide moieties in cultured normal and malignant cells. 85:429.
— *See* Kaariainen, Hashimoto, Saraste, Virtanen, and Penttinen.
— *See* Keski-Oja, Lehto, and Virtanen.
— *See* Laurila, Virtanen, Lehto, Vartio, and Stenman.
— *See* Lehto and Virtanen.
— *See* Regauer, Franke, and Virtanen.
Vitadello, M. *See* Bormioli, Sartore, Vitadello, and Schiaffino.

Vitale, A., and Chrispeels, M. J. Transient *N*-acetylglucosamine in the biosynthesis of phytohemagglutinin: attachment in the Golgi apparatus and removal in protein bodies. 99:133.
— *See* Bollini, Vitale, and Chrispeels.
Viti, M. *See* Robinson, Viti, and Höök.
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Vivarelli, E., Brown, W. E., Whalen, R. G., and Cossu, G. The expression of slow myosin during mammalian somitogenesis and limb bud differentiation. 107:2191.
Vlodavsky, I. *See* Rogelj, Klagsbrun, Atzmon, Kurokawa, Haimovitz, Fuks, and Vlodavsky.
Voelker, T. A. *See* Dorel, Voelker, Herman, and Chrispeels.
Voetman, A. A. *See* Roos, Voetman, and Meerhof.
Vogel, A., Ross, R., and Raines, E. Role of serum components in density-dependent inhibition of growth of cells in culture. Platelet-derived growth factor is the major serum determinant of saturation density. 85:377.
Vogel, A. M. *See* Charonis, Skubitz, Koliakos, Reger, Dege, Vogel, Wohlhueter, and Furcht.
— *See* Gown and Vogel.
— *See* Gown, Vogel, Gordon, and Lu.
Vogel, G., Thilo, L., Schwarz, H., and Steinhart, R. Mechanism of phagocytosis in *Dictyostelium discoideum*: phagocytosis is mediated by different recognition sites as disclosed by mutants with altered phagocytic properties. 86:456.
— *See* Waddell, Duffy, and Vogel.
Vogel, R. *See* Noda and Vogel.
Vogl, A. W., and Soucy, L. J. Arrangement and possible function of actin filament bundles in ectoplasmic specializations of ground squirrel Sertoli cells. 100:814.
—, **and Soucy, L. J.** Correction. 101:689.
Voglmayr, J. K. *See* Wolf, Hagopian, Lewis, Voglmayr, and Fairbanks.
— *See* Wolf and Voglmayr.
Vogt, P. K. *See* Woods, Boyer, Vogt, and Lazarides.
Vogt, V. M. *See* Muscarella, Vogt, and Bloom.
Volberg, T., Geiger, B., Kartenbeck, J., and Franke, W. W. Changes in membrane-microfilament interaction in intercellular adherens junctions upon removal of extracellular Ca^{2+} ions. 102:1832.
— *See* Geiger, Volk, and Volberg.
Volc-Platzer, B. *See* Moll, Franke, Volc-Platzer, and Krepler.
Volk, T., and Geiger, B. A-CAM: a 135kD receptor of intercellular adherens junctions. I. Immunoelectron microscopic localization and biochemical studies. 103:1441.
—, **and Geiger, B.** A-CAM: a 135 kD receptor of intercellular adherens junctions. II. Antibody-mediated modulation of junction formation. 103:1451.
— *See* Geiger, Volk, and Volberg.
Völkl, A. *See* Baumgart, Völkl, Hashimoto, and Fahimi.
Volloch, V., and Housman, D. Terminal differentiation of murine erythroleukemia cells: physical stabilization of end-stage cells. 93:390.
—, **Schweitzer, B., and Rits, S.** Synthesis of globin RNA in enucleated differentiating murine erythroleukemia cells. 105:137.
Volonté, C., Rukenstein, A., Loeb, D. M., and Greene, L. A. Differential inhibition of nerve growth factor responses by purine analogues: correlation with inhibition of a nerve growth factor-activated protein kinase. 109:2395.
Volpe, P. *See* Hashimoto, Bruno, Lew, Pozzan, Volpe, and Meldolesi.
Volpi, M., and Berlin, R. D. Intracellular elevations of free calcium induced by activation of histamine H1 receptors in interphase and mitotic HeLa cells: hormone signal transduction is altered during mitosis. 107:2533.
— *See* Sha'afi, Shefcyk, Yassin, Molski, Volpi, Naccache, White, Feinstein, and Becker.
— *See* Yassin, Shefcyk, White, Tao, Volpi, Molski, Naccache, Feinstein, and Sha'afi.
Volpin, D. *See* Colombatti, Bressan, Castellani, and Volpin.
Von Bulow, F. *See* Van Deurs, Von Bulow, and Moller.
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— *See* Dessau, Vertel, von der Mark, and von der Mark.
— *See* Goodman, Deutzmann, and von der Mark.
— *See* Goodman, Risse, and von der Mark.
— *See* Mollenhauer, Bee, Lizarbe, and von der Mark.
— *See* Swoboda, Holmdahl, Stöß, and von der Mark.
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— *See* Geuze, Slot, Strous, Hasilik, and von Figura.
— *See* Gieselmann, Pohlmann, Hasilik, and von Figura.
— *See* Lemansky, Hasilik, von Figura, Helmy, Fishman, Fine, Kedersha, and Rome.
— *See* Schulze-Lohoff, Hasilik, and von Figura.
von Glos, K. I. *See* Brown, von Glos, and Jones.
von Grafenstein, H., Roberts, C. S., and Baker, P. F. Kinetic analysis of the triggered exocytosis/endocytosis secretory cycle in cultured bovine adrenal medullary cells. 103:2343.
von Zastrow, M., and Castle, J. D. Protein sorting among two distinct export pathways occurs from the content of maturing exocrine storage granules. 105:2675.
Vorobjev, I. A., and Chentsov, Yu. S. Centrioles in the cell cycle. I. Epithelial cells. 93:938.
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Voter, W. A. *See* Walker, O'Brien, Pryer, Soboeiro, Voter, Erickson, and Salmon.
Voyta, J. C., Via, D. P., Butterfield, C. E., and Zetter, B. R. Identification and isolation of endothelial cells based on their increased uptake of acetylated-low density lipoprotein. 99:2034.
Vrbova, G. *See* Kennedy, Kamel, Tambone, Vrbova, and Zak.
Vuorio, E. *See* Hirvonen, Sandberg, Kalimo, Hukkanen, Vuorio, Salmi, and Alitalo.
— *See* Mali, Sandberg, Vuorio, Yelick, Hecht, and Parvinen.
— *See* Sandberg, Tammimen, Hirvonen, Vuorio, and Pihlajaniemi.
— *See* Sandberg and Vuorio.

W

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Waddel, D. R., Duffy, K., and Vogel, G. Cytokinesis is defective in *Dictyostelium* mutants with altered phagocytic recognition, adhesion, and vegetative cell cohesion properties. 105:2293.
—, **and Duffy, K. T. I.** Breakdown of self/nonself recognition is cannibalistic strains of the predatory slime mold, *Dictyostelium caveatum*. 102:298.
Wade, J. B. *See* Easter, Wade, and Boyer.
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—, **Shelden, E., Rupp, G., and Rieder, C. L.** Biotin-tubulin incorporates into the kinetochore fiber microtubules during early but not late anaphase. 109:2257.
—, **and Sloboda, R. D.** Microinjection of fluorescent tubulin into dividing sea urchin cells. 97:1249.
— *See* Cassimeris, Wadsworth, and Salmon.
Waggoner, A. S. *See* DeBiasio, Bright, Ernst, Waggoner, and Taylor.
— *See* Lanni, Waggoner, and Taylor.
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—, **Mayadas, T., and Marder, V. J.** Initial glycosylation and acidic pH in the Golgi apparatus are required for multimerization of von Willebrand factor. 102:1320.
—, **Mayadas, T., Urban-Pickering, M., Lewis, B. H., and Marder, V. J.** Inhibition of disulfide bonding of von Willebrand protein by monensin results in small, functionally defective multimers. 101:112.
—, **Olmstead, J. B., and Marder, V. J.** Immunolocalization of von Willebrand protein in Weibel-Palade antibodies of human endothelial cells. 95:355.
— *See* Sporn, Marder, and Wagner.
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— *See* Cremins, Wagner, and Halegoua.
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Wagter, R. *See* Homan, Musgrave, de Nobel, Wagter, de Wit, Kolk, and van den Ende.
Waizenegger, I. *See* Krohne, Waizenegger, and Höger.
Wakefield, L. M., Smith, D. M., Masui, T., Harris, C. C., and Sporn, M. B. Distribution and modulation of the cellular receptor for transforming growth factor-beta. 105:965.
— *See* Sporn, Roberts, Wakefield, and de Crombrugghe.

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— *See* Lew, Wollheim, Waldvogel, and Pozzan.
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Walker, G. *See* Bourguignon, Walker, Suchard, and Balazovich.
Walker, R. A., Inoué, S., and Salmon, E. D. Asymmetric behavior of severed microtubule ends after ultraviolet-microbeam irradiation of individual microtubules in vitro. 108:931.
—, **O'Brien, E. T., Pryer, N. K., Soboeiro, M. F., Voter, W. A., Erickson, H. P., and Salmon, E. D.** Dynamic instability of individual microtubules analyzed by video light microscopy: rate constants and transition frequencies. 107:1437.
Wall, D. *See* Sztul, Hendrick, Kraus, Wall, Kalousek, and Rosenberg.
Wall, D. A., and Hubbard, A. L. Galactose-specific recognition system of mammalian liver: Receptor distribution on the hepatocyte cell surface. 90:687.
—, **and Hubbard, A. L.** Receptor-mediated endocytosis of asialoglycoproteins by rat liver hepatocytes: biochemical characterization of the endosomal compartments. 101:2104.
—, **and Meleka, I.** An unusual lysosome compartment involved in vitellogenin endocytosis by *Xenopus* oocytes. 101:1651.
— *See* Faust, Wall, Perara, Lingappa, and Kornfeld.
— *See* Hubbard, Wall, and Ma.
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— *See* Marchese-Ragona, Wall, and Johnson.
— *See* Steven, Hainfield, Trus, Wall, and Steinert.
— *See* Steven, Hainfield, Wall, and Steer.
— *See* Tooney, Mosesson, Amrani, Hainfield, and Wall.
Wallace, B. G. Aggregating factor from *Torpedo* electric organ induces patches containing acetylcholine receptors, acetylcholin-esterase, and butyrylcholinesterase on cultured myotubes. 102:783.
— Regulation of agrin-induced acetylcholine receptor aggregation by Ca^{2++} and phorbol ester. 107:267.
— *See* Godfrey, Nitkin, Wallace, Rubin, and McMahon.
— *See* Nitkin, Smith, Magill, Fallon, Yao, Wallace, and McMahan.
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— *See* Tanabe, Mikkelsen, and Wallach.
Waller, C. A. *See* Dennis, Waller, and Schirrmacher.
Wallimann, T., Doetschman, T. C., and Eppenberger, H. M. A novel staining pattern of skeletal muscle M-lines upon incubation with antibodies aganist MM-creatine kinase. 96:1776.
—, **Walzthöny, D., Wegmann, G., Moser, H., Eppenberger, H. M., and Barrantes, F. J.** Subcellular localization of creatine kinase in *Torpedo* electrocytes: association with acetylcholine receptor-rich membranes. 100:1063.
Wallis, I., Ellis, L., Suh, K., and Pfenninger, K. H. Immunolocalization of a neuronal growth-dependent membrane glycoprotein. 101:1990.
— *See* Ellis, Wallis, Abreu, and Pfenninger.
Wallis, K. T. *See* Murphy, Grasser, and Wallis.
— *See* Murphy, Hiebsch, and Wallis.
— *See* Murphy, Wallis, and Hiebsch.
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— *See* Fulton and Walsh.
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— *See* Shea and Walsh.
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— *See* Doherty, Mann, and Walsh.
— *See* Moore, Thompson, Kirkness, Dickson, and Walsh.
— *See* Pizzey, Jones, and Walsh.
— *See* Pizzey, Rowett, Barton, Dickson, and Walsh.
Walsh, K. A. *See* Resing, Walsh, and Dale.
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Walter, M. F., and Biessmann, H. Intermediate-sized filaments in *Drosophila* tissue culture cells. 99:1468.
Walter, P., and Blobel, G. Subcellular distribution of signal recognition particle and 7SL-RNA determined with polypeptide-specific antibodies and cDNA probe. 97:1693.
—, **and Blobel, G.** Translocation of proteins across the endoplasmic reticulum. II. Signal recognition protein (SRP) mediates the selective binding to microsomal membranes of in vitro assembled polysomes synthesizing secretory protein. 91:551.
—, **and Blobel, G.** Translocation of proteins across the endoplasmic reticulum. III. Signal recognition protein (SRP) causes signal sequence-dependent and site-specific arrest of chain elongation that is released by microsomal membranes. 91:557.
—, **Ibrahimi, I., and Blobel, G.** Translocation of proteins across the endoplasmic reticulum. I. Signal recognition protein (SRP) binds to in vitro assembled polysomes synthesizing secretory protein. 91:545.
— *See* Anderson, Walter, and Blobel.
— *See* Andrews, Lauffer, Walter, and Lingappa.
— *See* Garcia, Ou, Rutter, and Walter.
— *See* Garcia and Walter.
— *See* Gilmore, Blobel, and Walter.
— *See* Gilmore, Walter, and Blobel.
— *See* Hann, Poritz, and Walter.
— *See* Hansen and Walter.
— *See* Krieg, Johnson, and Walter.
— *See* Siegel and Walter.
— *See* Tajima, Lauffer, Rath, and Walter.
— *See* Wolin and Walter.
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— *See* Tao, Walter, and Berns.
Walter, U. *See* De Camilli, Moretti, Donini, Walter, and Lohmann.
Walters, L. *See* Vertel, Velasco, LaFrance, Walters, and Kaczman-Daniel.
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Walz, B. Ca^{2+}-sequestering smooth endoplasmic reticulum in an invertebrate photoreceptor. I. Intracellular topography as revealed by OsFeCN staining and *in situ* Ca accumulation. 93:839.
— Ca^{2+}-sequestering smooth endoplasmic reticulum in an invertebrate photoreceptor. II. Its properties as revealed by microphotometric measurements. 93:849.
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— *See* Wallimann, Walzthöny, Wegmann, Moser, Eppenberger, and Barrantes.
Wampler, J. E. *See* Furukawa, Wampler, and Fechheimer.
Wan, K. M. *See* Fey, Wan, and Penman.
Wan, Y.-J., Wu, T.-C., Chung, A. E., and Damjanov, I. Monoclonal antibodies to laminin reveal the heterogeneity of basement membranes in the developing and adult mouse tissues. 98:971.
Wandosell, F. *See* Serrano, Díaz-Nido, Wandosell, and Avila.
Wang, D., Villasante, A., Lewis, S. A., and Cowan, N. J. The mammalian β-tubulin repertoire: hematopoietic expression of a novel, heterologous β-tubulin isotype. 103:1903.
Wang, E. A 57,000-mol-wt protein uniquely present in nonproliferating cells and senescent human fibroblasts. 100:545.
— Are cross-bridging structures involved in the bundle formation of intermediate filaments and the decrease in locomotion that accompany cell aging? 100:1466.
— Rapid disappearance of statin, a nonproliferating and senescent cell-specific protein, upon reentering the process of cell cycling. 101:1695.
—, **Cairncross, J. G., Yung, W. K. A., Garber, E. A., and Liem, R. K. H.** An intermediate filament associated protein, p50, recognized by monoclonal antibodies. 97:1507.
—, **Michl, J., Pfeffer, L. M., Silverstein, S. C., and Tamm, I.** Interferon suppresses pinocytosis but stimulates phagocytosis in mouse peritoneal macrophages: related changes in cytoskeletal organization. 98:1328.
—, **Yin, H. L., Krueger, J. G., Caliguiri, L. A., and Tamm, I.** Unphosphorylated gelsolin is localized in regions of cell-substratum contact or attachment in Rous sarcoma virus–transformed rat cells. 98:761.
— *See* Pfeffer, Wang, and Tamm.
— *See* Phaire-Washington, Silverstein, and Wang.
— *See* Phaire-Washington, Wang, and Silverstein.
Wang, G. *See* Wang, Wissinger, King, and Wang.
Wang, J. *See* Chen, Wang, Hasegawa, Yamada, and Yamada.
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— *See* Hsu and Wang.
— *See* Metcalf, Villanueva, Schindler, and Wang.
— *See* Moutsatsos, Davis, and Wang.
— *See* Steck, Blenis, Voss, and Wang.
Wang, K., and Ramirez-Mitchell, R. A network of transverse and longi-

tudinal intermediate filaments is associated with sarcomeres of adult vertebrate skeletal muscle. 96:562.
—, **and Wright, J.** Architecture of the sarcomere matrix of skeletal muscle: immunoelectron microscopic evidence that suggests a set of parellel inextensible nebulin filaments anchored at the Z line. 107:2199.
Wang, L.-L., and Spudich, J. A. A 45,000-mol-wt protein from unfertilized sea urchin eggs severs actin filaments in a calcium-dependent manner and increases the steady-state concentration of nonfilamentous actin. 99:844.
— *See* DeBiasio, Wang, Fisher, and Lansing Taylor.
Wang, M. *See* Stearns, Wang, Tew, and Binder.
Wang, P. *See* Cannon, Wang, and Roy.
Wang, R. J., Wissinger, W., King, E. J., and Wang, G. Studies on cell division in mammalian cells. VII. A temperature-sensitive cell line abnormal of centriole separation and chromosome movement. 96:301.
Wang, S.-M., Greaser, M. L., Schultz, E., Bulinski, J. C., Lin, J. J.-C., and Lessard, J. L. Studies on cardiac myofibrillogenesis with antibodies to titin, actin, tropomyosin, and myosin. 107:1075.
Wang, Y. Mobility of filamentous actin in living cytoplasm. 105:3007.
—, **and Goren, M. B.** Differential and sequential delivery of fluorescent lysosomal probes into phagosomes in mouse peritoneal macrophages. 104:1749.
— *See* McKenna, Meigs, and Wang.
— *See* Stickel and Wang.
Wang, Y.-C., and Rubenstein, P. A. Epidermal growth factor controls smooth muscle α-isoactin expression in BC3H1 cells. 106:797.
Wang, Y.-L. Exchange of actin subunits at the leading edge of living fibroblasts: possible role of treadmilling. 101:597.
— *See* Johnson, McKenna, and Wang.
— *See* McKenna, Johnson, and Wang.
— *See* McKenna, Meigs, and Wang.
— *See* McKenna, Wang, and Konkel.
— *See* Meigs and Wang.
— *See* Taylor, Wang, and Heiple.
Wang, Y.-l. Reorganization of actin filament bundles in living fibroblasts. 99:1478.
— *See* Stickel and Wang.
Wang, Z.-W., and Rozengurt, E. Interplay of cyclic AMP and microtubules in modulating the initiation of DNA synthesis in 3T3 cells. 96:1743.
Warburton, M. J., Ormerod, E. J., Monaghan, P., Ferns, S., and Rudland, P. S. Characterization of a myoepithelial cell line derived from a neonatal rat mammary gland. 91:827.
Ward, C. L. *See* Capps, Van Kampen, Ward, and Zúñiga.
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— *See* Hutchinson, Langer-Safer, Ward, and Hamkalo.
— *See* Manuelidis, Langer-Safer, and Ward.
Ward, G. E., Brokaw, C. J., Garbers, D. L., and Vacquier, V. D. Chemotaxis of *Arbacia punctulata* spermatozoa to resact, a peptide from the egg jelly layer. 101:2324.
—, **Moy, G. W., and Vacquier, V. D.** Phosphorylation of membrane-bound guanylate cyclase of sea urchin spermatozoa. 103:95.
Ward, J. B. *See* McNiven and Ward.
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Ward, S., Argon, Y., and Nelson, G. A. Sperm morphogenesis in wild-type and fertilization-defective mutants of *Caenorhabditis elegans*. 91:26.
—, **Roberts, T. M., Strome, S., Pavalko, F. M., and Hogan, E.** Monoclonal antibodies that recognize a polypeptide antigenic determinant shared by multiple *Caenorhabditis elegans* sperm-specific proteins. 102:1778.
— *See* Nelson, Roberts, and Ward.
— *See* Roberts, Pavalko, and Ward.
— *See* Roberts and Ward.
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Warn, A. *See* Warn, Flegg, and Warn.
— *See* Warn, Smith, and Warn.
Warn, R. M., Flegg, L., and Warn, A. An investigation of microtubule organization and functions in living *Drosophila* embryos by injection of a fluorescently labeled antibody against tyrosinated α-tubulin. 105:1721.
—, **Magrath, R., and Webb, S.** Distribution of F-actin during clevage of the *Drosophila* syncytial blastoderm. 98:156.
—, **Smith, L., and Warn, A.** Three distinct distributions of F-actin occur during the divisions of the polar surface caps to produce pole cells in *Drosophila* embryos. 100:1010.
Warner, A., and Gurdon, J. B. Functional gap junctions are not required for muscle gene activation by induction in *Xenopus* embryos. 104:557.
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— *See* Entwistle, Zalin, Warner, and Bevan.
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—, **and Zanetti, N. C.** Properties of microtubule sliding disintegration in isolated *Tetrahymena* cilia. 86:436.
— *See* Mitchell and Warner.
Warren, G., Featherstone, C., Griffiths, G., and Burke, B. Newly synthesized G protein of vesicular stomatitis virus is not transported to the cell surface during mitosis. 97:1623.
— *See* Chappell and Warren.
— *See* Featherstone, Griffiths, and Warren.
— *See* Griffiths, Brands, Burke, Louvard, and Warren.
— *See* Griffiths, Quinn, and Warren.
— *See* Griffiths, Warren, Quinn, Mathieu-Costello, and Hoppeler.
— *See* Louvard, Reggio, and Warren.
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— *See* Tooze, Tooze, and Warren.
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Warrick, H., Hsiung, N., Shows, T. B., and Kucherlapati, R. DNA-mediated cotransfer of unlinked mammalian cell markers into mouse L cells. 86:341.
Warshawsky, H., Goltzman, D., Rouleau, M. F., and Bergeron, J. J. M. Direct in vivo demonstration by radio-autography of specific binding sites for calcitonin in skeletal and renal tissues of the rat. 85:682.
Warty, V. S. *See* Herman, Brant, Warty, Bonaccorso, Klein, Kormos, and Borovetz.
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Wasmuth, J. J., and Chu, L.-Y. Linkage in cultured Chinese hamster cells of two genes, emtB and leuS, involved in protein synthesis and isolation of cell lines with mutations in three linked genes. 87:697.
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Watanabe, K. *See* Nishida, Nakagawa, Awata, Ohashi, Watanabe, and Manabe.
Watanabe, M., Frelinger, A. L., III, and Rutishauser, U. Topography of N-CAM structural and functional determinants. I. Classification of monoclonal antibody epitopes. 103:1721.
— *See* Haverty, Kelly, Hines, Amenta, Watanabe, Harper, Kefalides, and Neilson.
— *See* Rutishauser, Watanabe, Silver, Troy, and Vimr.
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— *See* Spray, Fujita, Saez, Choi, Watanabe, Hertzberg, Rosenberg, and Reid.
Wataya-Kaneda, M., Kaneda, Y., Sakurai, T., Sugawa, H., and Uchida, T. A monoclonal antibody against the nucleus reveals the presence of a common protein in the nuclear envelope, the perichromosomal region, and cytoplasmic vesicles. 104:1.
Waters, M. G., and Blobel, G. Secretory protein translocation in a yeast cell-free system can occur posttranslationally and requires ATP hydrolysis. 102:1543.
—, **Chirico, W. J., and Blobel, G.** Protein translocation across the yeast microsomal membrane is stimulated by a soluble factor. 103:2629.
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— *See* Whalen, Toutant, Butler-Browne, and Watkins.
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—, **and Green, H.** Involucrin synthesis is correlated with cell size in human epidermal cultures. 90:738.
—, **Mattey, D. L., and Garrod, D. R.** Calcium-induced reorganization of desmosomal components in cultured human keratinocytes. 99:2211.
— *See* Adams and Watt.
— *See* Zanetti, Ratcliffe, and Watt.

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— *See* Huang, Watterson, Lee, and Schibler.
— *See* Roberts, Zielinski, Schleicher, and Watterson.
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— *See* Davidson and Watts.
— *See* West, Bretscher, and Watts.
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Way, M., Gooch, J., Pope, B., and Weeds, A. G. Expression of human plasma gelsolin in *Escherichia coli* and dissection of actin binding sites by segmental deletion mutagenesis. 109:593.
Wayner, E. *See* Languino, Gehlsen, Wayner, Carter, Engvall, and Ruoslahti.
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—, Carter, W. G., Piotrowicz, R. S., and Kunicki, T. J. The function of multiple extracellular matrix receptors in mediating cell adhesion to extracellular matrix: preparation of monoclonal antibodies to the fibronectin receptor that specifically inhibit cell adhesion to fibronectin and react with platelet glycoproteins Ic-Ha. 107:1881.
—, Garcia-Pardo, A., Humphries, M. J., McDonald, J. A., and Carter, W. G. Identification and characterization of the lymphocyte adhesion receptor for an alternative cell attachment domain in plasma fibronectin. 109:1321.
— *See* Roman, LaChance, Broekelmann, Kennedy, Wayner, Carter, and McDonald.
— *See* Staatz, Rajpara, Wayner, Carter, and Santoro.
Weatherbee, J. A., May, G. S., Gambino, J., and Morris, N. R. Involvement of a particular species of beta-tubulin (beta3) in conidial development in *Aspergillus nidulans*. 101:706.
—, Sherline, P., Mascardo, R. N., Izant, J. G., Luftig, R. B., and Weihing, R. R. Microtubule-associated proteins of HeLa cells: heat-stability of the 200,000 mol wt HeLa MAPs and detection of the presence of MAP-2 in HeLa cell extracts and cycled microtubules. 92:155.
— *See* Izant, Weatherbee, and McIntosh.
— *See* May, Gambino, Weatherbee, and Morris.
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Webb, D. J., and Nuccitelli, R. Direct measurement of intracellular pH changes in *Xenopus* eggs at fertilization and cleavage. 91:562.
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— *See* Barak, Yocum, and Webb.
— *See* Carley, Barak, and Webb.
— *See* Menon, Holowka, Webb, and Baird.
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— *See* Nothnagel and Webb.
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— *See* Hill and Weber.
— *See* Nave, Fürst, and Weber.
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— *See* Schroder, Wehland, and Weber.
— *See* Wehland and Weber.
— *See* Wick, Seagull, Osborn, Weber, and Gunning.
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Webster, P., and Grab, D. J. Intracellular colocalization of variant surface glycoprotein and transferrin–gold in *Trypanosoma brucei*. 106:279.
— *See* Grab, Webster, Ito, Fish, Verjee, and Lonsdale-Eccles.
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— *See* Copeland, Doms, Bolzau, Webster, and Helenius.
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— *See* Giffard, Weeds, and Spudich.
— *See* Way, Gooch, Pope, and Weeds.
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Wegmann, G. *See* Wallimann, Walzthöny, Wegmann, Moser, Eppenberger, and Barrantes.
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Wehland, J., and Weber, K. Tubulin-tyrosine ligase has a binding site on β-tubulin: a two-domain structure of the enzyme. 104:1059.
—, and Willingham, M. C. A rat monoclonal antibody reacting specifically with the tyrosylated form of α-tubulin. II. Effects on cell movement, organization of microtubules, and intermediate filaments, and arrangement of Golgi elements. 97:1476.
—, Willingham, M. C., and Sandoval, I. V. A rat monoclonal antibody reacting specifically with the tyrosylated form of α-tubulin. I. Biochemical characterization, effects on microtubule polymerization in vitro, and microtubule polymerization and organization in vivo. 97:1467.
— *See* Schroder, Wehland, and Weber.
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— *See* Schwerzmann, Cruz-Orive, Eggmann, Sänger, and Weibel.
Weich, N. *See* Christman, Weich, Schoenbrun, Schneiderman, and Acs.
Weidman, P. J., Kay, E. S., and Shapiro, B. M. Assembly of the sea urchin fertilization membrane: isolation of proteoliaisin, a calcium-dependent ovoperoxidase binding protein. 100:938.
—, Malançon, P., Block, M. R., and Rothman, J. E. Binding of an *N*-ethylmaleimide-sensitive fusion protein to Golgi membranes requires both a soluble protein and an integral membrane receptor. 108:1589.
—, and Shapiro, B. M. Regulation of extracellular matrix assembly: in vitro reconstruction of a partial fertilization envelope from isolated components. 105:561.
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—, and Byrd, W. The microsporidian spore invasion tube. III. Tube extrusion and assembly. 93:976.
— *See* Pleshinger and Weidner.
— *See* Sibley, Krahenbuhl, Adams, and Weidner.
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— *See* Oka and Weigel.
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— *See* Maciag, Kadish, Wilkins, Stemerman, and Weinstein.
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— *See* Fougere-Deschatrette, Schimke, Weil, and Weiss.
— *See* Mevel-Ninio and Weiss.
Weiss, R. A., Eichner, R., and Sun, T.-T. Monoclonal antibody analysis of keratin expression in epidermal diseases: a 48- and 56-kdalton keratin as molecular markers for hyperproliferative keratinocytes. 98:1397.
Weiss, R. E., and Reddi, A. H. Appearance of fibronectin during the differentiation of cartilage, bone, and bone marrow. 88:630.
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— *See* Bonifacino, Suzuki, Lippincott-Schwartz, Weissman, and Klausner.
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Welch, W. J., and Mizzen, L. A. Characterization of the thermotolerant cell. II. Effects on the intracellular distribution of heat-shock protein 70, intermediate filaments, and small nuclear ribonucleo-protein complexes. 106:1117.
—, **and Suhan, J. P.** Cellular and biochemical events in mammalian cells during and after recovery from physiological stress. 103:2035.
—, **and Suhan, J. P.** Morphological study of the mamalian stress response: characterization of changes in cytoplasmic organelles, cytoskeleton, and nucleoli, and appearance of intranuclear actin filaments in rat fibroblasts after heat-shock treatment. 101:1198.
— *See* Lamb, Fernandez, Conti, Adelstein, Glass, Welch, and Feramisco.
— *See* Lamb, Fernandez, Feramisco, and Welch.
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Weltzin, R., Lucia-Jandris, P., Mitchetti, P., Fields, B. N., Krachenbuhl, J. P., and Neutra, M. R. Binding and transepithelial transport of immunoglobulins by intestinal M cells: demonstration using monoclonal IgA antibodies against enteric viral proteins. 108:1673.
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—, **Hembry, R M., Murphy, G., and Aggeler, J.** Commitment to expression of the metalloendopeptidases, collagenase and stromelysin: relationship of inducing events to changes in cytoskeletal architecture. 102:697.
—, **Tremble, P. M., Behrendtsen, O., Crowley, E., and Damsky, C. H.** Signal transduction through the fibronectin receptor induces collagenase and stromelysin gene expression. 109:877.
— *See* Aggeler, Frisch, and Werb.
— *See* Aggeler, Takemura, and Werb.
— *See* Aggeler and Werb.
— *See* Glass, Aggeler, Spindle, Pedersen, and Werb.
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— *See* Unemori and Werb.
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— *See* Ecob-Prince, Jenkison, Butler-Browne, and Whalen.
— *See* Vivarelli, Brown, Whalen, and Cossu.
— *See* Wieczorek, Periasamy, Butler-Browne, Whalen, and Nadal-Ginard.
Wharton, K. A. *See* Mooseker, Graves, Wharton, Falco, and Howe.
— *See* Mooseker, Pollard, and Wharton.
Wheeler, M. E., Gerrard, J. M., and Carroll, R. C. Reciprocal transmembrane receptor–cytoskeleton interactions in concanavalin A–activated platelets. 101:993.
Whelan, J. F. *See* Githens, Holmquist, Whelan, and Ruby.
Whisenand, J. *See* Painter, Whisenand, and McIntosh.
Whitaker, D. *See* Erdos and Whitaker.
Whitaker, J. N. *See* Cheng, Byrd, Whitaker, and Wood.
— *See* Wood, Wallace, Whitaker, and Cheung
Whitaker, M. *See* Swann and Whitaker.
Whitaker-Dowling, P. A. *See* Wilcox, Whitaker-Dowling, Youngner, and Widnell.
White, A. R. *See* Haigler, White, Brown, and Cooper.
White, E., Tolbert, E. M., and Katz, E. R. Identification of tubulin in *Dictyostelium discoideum:* characterization of some unique properties. 97:1011.
White, E. M., Allis, C. D., Goldfarb, D. S., Srivastva, A., Weir, J. W., and Gorovsky, M. A. Nuclear-specific and temporally restricted localization of proteins *Tetrahymena* macronuclei and micronuclei. 109:1983.
White, G. E., and Fujiwara, K. Expression and intracellular distribution of stress fibers in aortic endothelium. 103:63.
—, **Gimbrone, M. A., Jr., and Fujiwara, K.** Factors influencing the expression of stress fibers in vascular endothelial cells in situ. 97:416.
White, J., Kartenbeck, J., and Helenius, A. Fusion of Semliki Forest virus with plasma membrane can be induced by low pH. 87:264.
—, **Matlin, K., and Helenius, A.** Cell fusion by Semliki Forest, influenza, and vesicular stomatitis viruses. 89:674.
— *See* Doxsey, Sambrook, Helenius, and White.
— *See* Marsh, Bolzau, White, and Helenius.
White, J. G., Amos, W. B., and Fordham, M. An evaluation of confocal versus conventional imaging of biological structures by fluorescence light microscopy. 105:41.
— *See* Cohen, Gerrard, and White.
— *See* Cox, Carroll, White, and Rao.
— *See* Ginsberg, Wencel, White, and Plow.
— *See* Hymann and White.
— *See* Sauk, Krumweide, Cocking-Johnson, and White.
White, J. M., and Wilson, I. A. Anti–peptide antibodies detect steps in a protein conformational change: low pH activation of the influenza virus hemagglutinin. 105:2887.
White, J. R. *See* Gething, Doms, York, and White.
— *See* Sha'afi, Shefcyk, Yassin, Molski, Volpi, Naccache, White, Feinstein, and Becker.
— *See* Yassin, Shefcyk, White, Tao, Volpi, Molski, Naccache, Feinstein, and Sha'afi.
White, M. F. *See* Carpentier, White, Orci, and Kahn.
— *See* Haring, White, Kahn, Kasuga, and Lauris.
Whitely, B., and Glaser, L. Epidermal growth factor (EGF) promotes phosphorylation at threonine-654 of the EGF receptor: possible role of protein kinase C in homologous regulation of the EGF receptor. 103:1355.
—, **Glaser, L., Zhuang, Y.-X., and Cassel, D.** Tumor promoter phorbol 12-myristate 13-acetate inhibits mitogen-stimulated Na^+/H^+ exchange in human epidermoid carcinoma A431 cells. 99:1162.
Whitfeld, P. L. *See* Stirzaker, Whitfeld, Christie, Bellamy, and Both.
Whitney, J. A. *See* Wilson, Whitney, and Neutra.
Whitson, S. W., Harrison, W., Dunlap, M. K., Bowers, D. E., Jr., Fisher, L. W., Robey, P. G., and Termine, J. D. Fetal bovine bone cells

synthesize bone-specific matrix proteins. 99:607.
Wible, L. *See* Brinkley, Cox, Pepper, Wible, Brenner, and Pardue.
— *See* Cabral, Wible, Brenner, and Brinkley.
Wibo, M., Thines-Sempoux, D., Amar-Costesec, A., Beaufay, H., and Godelaine, D. Analytical study of microsomes and isolated subcellular membranes from rat liver. VIII. Subfraction of preparations enriched with plasma membranes, outer mitochondrial membranes, or Golgi complex membranes. 89:456.
— *See* Godelaine, Beaufay, Wibo, and Ravoet.
Wicha, M. S. *See* Malinoff and Wicha.
Wiche, G., Krepler, R., Artlieb, U., Pytela, R., and Denk, H. Occurrence and immunolocalization of plectin in tissues. 97:887.
— *See* Foisner, Leichtfried, Herrmann, Small, Lawson, and Wiche.
Wick, S. M., and Duniec, J. Immunofluorescence microscopy of tubulin and microtubule arrays in plant cells. I. Pre-prophase band development and concomitant appearance of nuclear envelope-associated tubulin. 97:235.
—, **and Hepler, P. K.** Localization of Ca^{++}-containing antimonate precipitates during mitosis. 86:500.
—, **Seagull, R. W., Osborn, M., Weber, K., and Gunning, B. E. S.** Immunofluorescence microscopy of organized microtubule arrays in structurally stabilized meristematic plant cells. 89:685.
Wickner, W. *See* Guthrie and Wickner.
— *See* Weisman, Bacallao, and Wickner.
Widnell, C. C. *See* Wilcox, Kitson, and Widnell.
— *See* Wilcox, Whitaker-Dowling, Youngner, and Widnell.
Wieben, E. D. Regulation of the synthesis of lactate dehydrogenase-X during spermatogenesis in the mouse. 88:492.
—, **Madore, S., and Pederson, T.** U1 small nuclear ribonucleoprotein studied by in vitro assembly. 96:1751.
— *See* Madore, Wieben, Kunkel, and Pederson.
— *See* Madore, Wieben, and Pederson.
— *See* Patton and Weiben.
Wieczorek, D. F., Periasamy, M., Butler-Browne, G. S., Whalen, R. G., and Nadal-Ginard, B. Co-expression of multiple myosin heavy chain genes, in addition to a tissue-specific one, in extraocular musculature. 101:618.
Wiedemann, H. *See* Mayne, Wiedemann, Irwin, Sanderson, Fitch, Linsenmayer, and Kühn.
Wiedenmann, B., Lawley, K., Grund, C., and Branton, D. Solubilization of proteins from bovine brain coated vesicles by protein perturbants and Triton X-100. 101:12.
Wiedmann, M., Kurzchalia, T. V., Bielka, H., and Rapoport, T. A. Direct probing of the interaction between the signal sequence of nascent preprolactin and the signal recognition particle by specific cross-linking. 104:201.
Wiegant, F. A. C., Blok, F. J., Defize, L. H. K., Linnemans, W. A. M., Verkley, A. J., and Boonstra, J. Epidermal growth factor receptors associated to cytoskeletal elements of epidermoid carcinoma (A431) cells. 103:87.
— *See* Roos, Spiele, Feltkamp, Huisman, Wiegant, Traas, and Mesland.
Wieland, S. J. *See* Eisen, Kiehart, Weiland, and Reynolds.
Wienhues, U. *See* Rassow, Guiard, Wienhues, Herzog, Hartl, and Neupert.
Wier, M. L., and Edidin, M. Effects of cell density and extracellular matrix on the lateral diffusion of major histocompatibility antigens in cultured fibroblasts. 103:215.
—, **and Scott, R. E.** Regulation of the terminal event in cellular differentiation: biological mechanisms of the loss of proliferative potential. 102:1955.
Wierenga, P. D. *See* Nijhof and Wierenga.
Wieser, R. J., and Oesch, F. Contact inhibition of growth of human diploid fibroblasts by immobilized plasma membrane glycoproteins. 103:361.
Wiggins, R. C. *See* Patsalos, Bell, and Wiggins.
Wiggins, J. C. *See* Allis, Allen, Wiggins, Chicoine, and Richman.
Wight, T. N., and Hascall, V. C. Proteoglycans in primate arteries. III. Characterization of the proteoglycans synthesized by arterial smooth muscle cells in culture. 96:167.
— *See* Carlson and Wight.
— *See* Garrigues, Lark, Lara, Hellström, Hellström, and Wight.
— *See* Kinsella and Wight.
— *See* Oohira, Wight, McPherson, and Bornstein.
— *See* Schmidt, Glomset, Wight, Habenicht, and Ross.
Wijnaendts-van-Resandt, R. W. *See* van Meer, Stelzer, Wijnaendts-van-Resandt, and Simons.
Wilchek, M. *See* Spiegel, Kassis, Wilchek, and Fishman.
Wilcox, C. *See* Olson, Sternberg, Hu, Spizz, and Wilcox.
Wilcox, D. K., Kitson, R. P., and Widnell, C. C. Inhibition of pinocytosis in rat embryo fibroblasts treated with monensin. 92:859.
—, **Whitaker-Dowling, P. A., Youngner, J. S., and Widnell, C. C.** Rapid inhibition of pinocytosis in baby hamster kidney (BHK-21) cells following infection with vesicular stomatitis virus. 97:1444.
Wilde, M. W. *See* Slonczewski, Wilde, and Zigmond.
Wiley, C. A., and Ellisman, M. H. Rows of dimeric-particles within the axolemma and juxtaposed particles within glia, incorporated into a new model for the paranodal glial-azonal junction at the node of Ranvier. 84:261.
Wiley, H. S. Anomalous binding of epidermal growth factor to A431 cells is due to the effect of high receptor densities and a saturable endocytic system. 107:801.
— *See* Kaplan, Mcvey, Ward, and Wiley.
Wilk, E. W. *See* Horwitz, Chia, Harracksingh, Orlow, Pifko-Hirst, Schneck, Sorbara, Speaker, and Wilk.
Wilkens, J. A., and Lin S. A re-examination of the interaction of vinculin with actin. 102:1085.
—, **Risinger, M. A., and Lin, S.** Studies on proteins that co-purify with smooth muscle vinculin: identification of immunologically related species in focal adhesions of nonmuscle and Z-lines of muscle cells. 103:1483.
Wilkins, L. *See* Maciag, Kadish, Wilkins, Stemerman, and Weinstein.
Wilkinson, J. *See* Gould, Keller, Hosken, Wilkinson, and Subramani.
Wilkinson, P. C., Lackie, J. M., Forrester, J. V., and Dunn, G. A. Chemokinetic accumulation of human neutrophils on immune-complex-coated substrata: analysis at a boundary. 99:1761.
— *See* Haston, Shields, and Wilkinson.
Willard, M., and Simon, C. Antibody decoration of neurofilaments. 89:198.
—, **Simon, C., Baitinger, C., Levine, J., and Skene, P.** Association of an axonally transported polypeptide (H) with 100-Å filaments. Use of immunoaffinity electron microscope grids. 85:587.
— *See* Levine and Willard.
— *See* Skene and Willard.
Willard, M. B. *See* Hirokawa, Glicksman, and Willard.
Wille, H. *See* Hagstedt, Lichtenberg, Wille, Mandelkow, and Mandelkow.
Wille, J. J., Jr. *See* Scott, Hoerl, Wille, Florine, Krawisz, and Yun.
Willecke, K. *See* Abken, Jungfer, Albert, and Willecke.
— *See* Dermietzel, Yancey, Traub, Willecke, and Revel.
— *See* Traub, Look, Dermietzel, Brümmer, Hülser, and Willecke.
Willemsen, R. *See* Strous, van Kerkhof, Willemsen, Geuze, and Berger.
— *See* Strous, Willemsen, van Kerkhof, Slot, Geuze, and Lodish.
Williams, A. K, *See* Bunge, Williams, Wood, Uitto, and Jeffrey.
— *See* Salzer, Williams, Glaser, and Bunge.
Williams, B. D., Mitchell, D. R., and Rosenbaum, J. L. Molecular cloning and expression of flagellar radial spoke and dynein genes of *Chlamydomonas*. 103:1.
—, **Velleca, M. A., Curry, A. M., and Rosenbaum, J. L.** Molecular cloning and sequence analysis of the *Chlamydomonas* gene coding for radial spoke protein 3: flagellar mutation *pf-14* is an ochre allele. 109:235.
Williams, D. B., Swiedler, S. J., and Hart, G. W. Intracellular transport of membrane glycoproteins: two closely related histo-compatibility antigens differ in their rates of transit to the cell surface. 101:725.
Williams, D. L. *See* LeBlanc, Földvari, Spencer, Brockenridge, Fenwick, Williams, and Mezei.
— *See* Winter, Palatnik, Williams, Coles, Wells, and Gordon.
Williams, G. T. Specific inhibition of the differentiation of *Trypanosoma cruzi*. 99:79.
Williams, J. A. *See* Logsdon, Moessner, Williams, and Goldfine.
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Williams, L. A. *See* Wistow, Lietman, Williams, Stapel, de Jong, Horwitz, and Piatigorsky.
Williams, L. K. *See* Landreth, Williams, and McCutchen.
— *See* Landreth, Williams, and Rieser.
Williams, R. C., Gingrich, J. C., and Glazer, A. N. Cyanobacterial phycobilisomes. Particles from *Synechocystis* 6701 and two pigment mutants. 85:558.
— *See* Gingrich, Williams, and Glazer.
Williams, R. C., Jr. *See* Neighbors, Williams, and McIntosh.
— *See* Tseng, Runge, Cooper, Williams, and Pollard.
Williams, R. K., Goridis, C., and Akeson, R. Individual neural cell types express immunologically distinct N-CAM forms. 101:36.
Williams, R. O. *See* Roditi, Schwarz, Pearson, Beecroft, Liu, Richardson, Bühring, Pleiss, Bülow, Williams, and Overath.
Williams, S. K. *See* Madri and Williams.
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Williamson, J. R. *See* Busa, Ferguson, Joseph, Williamson, and Nuccitelli.
Williamson, P. L. *See* Del Buono, Williamson, and Schlegel.
Willingham, M. C., and Pastan, I. H. Transit of epidermal growth factor through coated pits of the Golgi system. 94:207.
— *See* Chen, Murphy, Willingham, Pastan, and August.
— *See* Dickson, Willingham, and Pastan.
— *See* Gal, Willingham, and Gottesman.

— *See* Wehland and Willingham.
— *See* Wehland, Willingham, and Sandoval.
Wills, A. J. *See* Nomura, Wills, Edwards, Heath, and Hogan.
Wills, J. W., Srinivas, R. V., and Hunter, E. Mutations of the Rous sarcoma virus *env* gene that affect the transpand subcellular location of the glycoprotein products. 99:2011.
— *See* Hardwick, Shaw, Wills, and Hunter.
Wilman, D. *See* Ronne, Ocklind, Wiman, Rask, Obrink, and Peterson.
Wilner, G. D. *See* Bar-Shavit, Kahn, Fenton, and Wilner.
Wilson, C., Connolly, T., Morrison, T., and Gilmore, R. Integration of membrane proteins into the endoplasmic reticulum requires GTP. 107:69.
Wilson, C. L. *See* Schwarzbauer, Spencer, and Wilson.
Wilson, D. R. *See* Darlington, Wilson, and Lachman.
Wilson, I. *See* Gallagher, Henneberry, Wilson, Sambrook, and Gething.
Wilson, I. A. *See* White and Wilson.
Wilson, J. M., Whitney, J. A., and Neutra, M. R. Identification of an endosomal antigen specific to absorptive cells of suckling rat ileum. 105:691.
— *See* Amerongen, Mack, Wilson, and Neutra.
Wilson, K. L., and Newport, J. A trypsin-sensitive receptor on membrane vesicles is required for nuclear envelope formation in vitro. 107:57.
Wilson, L., Miller, H. P., Pfeffer, T. A., Sullivan, K. F., and Detrich, H. W., III. Colchicine-binding activity distinguishes sea urchin egg and outer doublet tubulins. 99:37.
— *See* Farrell, Jordan, Miller, and Wilson.
Wilson, M. C. *See* Oyler, Higgins, Hart, Battenberg, Billingsley, Bloom, and Wilson.
Wilson, P. D., Firestone, R. A., and Lenard, J. The role of lysosomal enzymes in killing of mammalian cells by the lysosomotropic detergent *N*-dodecylimidazole. 104:1223.
Wilson, R. C. *See* Zeitlin, Wilson, and Efstratiadis.
Wilson, S. P. *See* Phillips, Burridge, Wilson, and Kirshner.
Wilt, F. *See* Benson, Benson, and Wilt.
Wiman, K. *See* Ronne, Ocklind, Wiman, Rask, Öbrink, and Peterson.
Wind, R. *See* Czaja, Weiner, Flanders, Giambrone, Wind, Biempica, and Zern.
Winkler, H. *See* Patzak, Böck, Fischer-Colbrie, Schauenstein, Schmidt, Lingg, and Winkler.
— *See* Patzak and Winkler.
Winkler, M. M. *See* Grainger and Winkler.
Winkles, J. A., and Grainger, R. M. Differential stability of *Drosophila* embryonic mRNAs during subsequent larval development. 101:1808.
— *See* Miyatani, Winkles, Sargent, and Dawid.
Winn, B. *See* Schor, Allen, and Winn.
Winningham-Major, F., Staecker, J. L., Barger, S. W., Coats, S., and Van Eldik, L. J. Neurite extension and neuronal survival activities of recombinant S100 proteins that differ in the content and position of cysteine residues. 109:3063.
Winograd, E., and Sherman, I. W. Characterization of a modified red cell membrane protein expressed on erythrocytes infected with the human malaria parasite *Plasmodium falciparum*. Possible role as a cytoadherent mediating protein. 108:23.
Winter, E., Levy, D., and Gordon, J. S. Changes in the H-1 histone complement during myogensis. I. Establishment by differential coupling of H-1 species synthesis to DNA replication. 101:167.
—, **Palatnik, C. M., Williams, D. L., Coles, L. S., Wells, J. R. E., and Gordon, J. S.** Changes in the H-1 histone complement during myogenesis. II. Regulation by differential coupling of H-1 variant mRNA accumulation to DNA replication. 101:175.
Winter, H. *See* Rentrop, Knapp, Winter, and Schweizer.
Winter, J. *See* Mirsky, Winter, Abney, Pruss, Gavrilovic, and Raff.
Winter, S. *See* Franke, Heid, Grund, Winter, Freudenstein, Schmid, Jarasch, and Keenan.
— *See* Franke, Winter, Grund, Schmid, Schiller, and Jarasch.
Winterhalter, K. H. *See* Bruckner, Hörler, Mendler, Houze, Winterhalter, Eich-Bender, and Spycher.
— *See* Mendler, Eich-Bender, Vaughan, Winterhalter, and Bruckner.
— *See* Müller-Glauser, Humbel, Glatt, Sträuli, Winterhalter, and Bruckner.
— *See* Vaughan, Mendler, Huber, Bruckner, Winterhalter, Irwin, and Mayne.
Wire, B. *See* Ash, Fineman, Kalka, Morgan, and Wire.
Wischik, C. M., Crowther, R. A., Stewart, M., and Roth, M. Subunit structure of paired helical filaments in Alzheimer's disease. 100:1905.
Wise, D. *See* Hays, Wise, and Salmon.
— *See* Kubai and Wise.
Wise, P. J. *See* Danpure, Cooper, Wise, and Jennings.
Wiser, M. F., Wood, P. A., Eaton, J. W., and Sheppard, J. R. Membrane-associated phosphoproteins in *Plasmodium berghei*-infected murine erythrocytes. 97:196.
Wisniewski, H. *See* Czosnek, Soifer, and Wisniewski.
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Wisniewski, T. *See* Moon, Wisniewski, Merz, De Martini, and Wisniewski.
Wissinger, W. *See* Wang, Wissinger, King, and Wang.
Wistow, G. J., Lietman, T., Williams, L. A., Stapel, S. O., de Jong, W. W., Horwitz, J., and Piatigorsky, J. τ-Crystallin/α-enolase: one gene encodes both an enzyme and a lens structural protein. 107:2731.
Witaker, M. *See* Chandler, Witaker, and Zimmerberg.
Witke, W., Schleicher, M., Lottspeich, F., and Noegel, A. Studies on the transcription, translation, and structure of α-actinin in *Dictyostelium discoideum*. 103:969.
Witman, G. *See* Kamiya and Witman.
Witman, G. B. *See* Bessen, Fay, and Witman.
— *See* Gitelman and Witman.
— *See* Hoops and Witman.
— *See* Hoops, Wright, Jarvik, and Witman.
— *See* King and Witman.
— *See* Remillard and Witman.
Witt, D. P., Brown, D. J., and Gordon, J. A. Transformation-sensitive isoactin in passaged chick embryo fibroblasts transformed by Rous sarcoma virus. 96:1766.
—, **and Gordon, J. A.** Most iodinatable fibroblast surface proteins accompany the cytoplast membrane during cytochalasin B-mediated enucleation of chick embryo fibroblasts. 94:557.
Wittenberg, C., Richardson, S. L., and Reed, S. I. Subcellular localization of a protein kinase required for cell cycle initiation in *Saccharomyces cerevisiae*: evidence for an association between the *CDC28* gene product and the insoluble cytoplasmic matrix. 105:1527.
Wittig, B., Dorbic, T., and Rich, A. The level of Z-DNA in metabolically active, permeabilized mammalian cell nuclei is regulated by torsional strain. 108:755.
Woda, B. A., Yguerabide, J., and Feldman, J. D. Mobility of surface proteins, on normal rat macrophages and on a "macrophagelike" rat tumor. 90:705.
Wofsy, L. *See* Kuby and Wofsy.
Wohlhueter, R. *See* Charonis, Skubitz, Koliakos, Reger, Dege, Vogel, Wohlhueter, and Furcht.
Wojcieszyn, J. W., Schlegel, R. A., Lumley-Sapanski, K., and Jacobson, K. A. Studies on the mechanism of polyethylene glocol-mediated cell fusion using fluorescent membrane and cytoplasmic probes. 96:151.
Wojtyk, R. I., and Goldstein, S. Clonal selection in cultured human fibroblasts: role of protein synthetic errors. 95:704
Wold, B. J. *See* Moon, Ngai, Wold, and Lazarides.
Wolf, D. E., Hagopian, S. S., and Ishijima, S. Changes in sperm plasma membrane lipid diffusibility after hyperactivation during in vitro capacitation in the mouse. 102:1372.
—, **Hagopian, S. S., Lewis, R. G., Voglmayr, J. K., and Fairbanks, G.** Lateral regionalization and diffusion of a maturation-dependent antigen in the ram sperm plasma membrane. 102:1826.
—, **Scott, B. K., and Millette, C. F.** The development of regionalized lipid diffusibility in the germ cell plasma membrane during spermatogenesis in the mouse. 103:1745.
—, **and Voglmayr, J. K.** Diffusion and regionalization in membranes of maturing ram spermatozoa. 98:1678.
—, **and Ziomek, C. A.** Regionalization and lateral diffusion of membrane proteins in unfertilized and fertilized mouse eggs. 96:1786.
Wolf, D. P. *See* Chilton, Nicosia, Sowinski, and Wolf.
Wolfe, D. E. *See* Diglio, Wolfe, and Meyers.
Wolfe, J. A possible skeletal substructure of the macronucleus of *Tetrahymena*. 84:160.
Wolfe, R. A., Sato, G. H., and McClure, D. B. Continuous culture of rat C6 glioma in serum-free medium. 87:434.
Wolff, J. M. *See* Rathjen, Wolff, Frank, Bonhoeffer, and Rutishauser.
Wolff, K. *See* Schuler, Hintner, Wolff, Fritsch, and Stingl.
Wolfgang, W. J., Fristrom, D., and Fristrom, J. W. The pupal cuticle of *Drosophila*: differential ultrastructural immunolocalization of cuticle proteins. 102:306.
Wolfman, A. *See* Kumar, Wolfman, Panniers, and Henshaw.
Wolin, S. L., and Walter, P. Signal recognition particle mediates a transient elongation arrest of preprolactin in reticulocyte lysate. 109:2617.
Wolinsky, J. *See* Tennekoon, Zaruba, and Wolinsky.
Wolkoff, A. W., Klausner, R. D., Ashwell, G., and Harford, J. Intracellular segregation of asialoglycoproteins and their receptor: a prelysosomal event subsequent to dissociation of the ligand-receptor complex. 98:375.
— *See* Harford, Wolkoff, Ashwell, and Klausner.
Wolley, R. C. *See* Dembitzer, Herz, Schermer, Wolley, and Koss.

Wollheim, C. B. *See* Lew, Wollheim, Waldvogel, and Pozzan.
— *See* Schlegel and Wollheim.
Wollman, F.-A., and Delepelaire, P. Correlation between changes in light energy distribution and changes in thylakoid membrane polypeptide phosphorylation in *Chlamydomonas reinhardtii*. 98:1.
—, **Olive, J., Bennoun, P., and Recouvreur, M.** Organization of the photosystem II centers and their associated antennae in the thylakoid membranes: A comparative ultrastructural, biochemical, and biophysical study of *Chlamydomonas* wild type and mutants lacking in photosystem II reaction centers. 87:728.
— *See* de Vitry, Olive, Drapier, Recouvreur, and Wollman.
Wollman, S. H. *See* Garbi and Wollman.
— *See* Nitsch and Wollman.
Wolniak, S. M., Hepler, P. K., and Jackson, W. T. Detection of the membrane-calcium distribution during mitosis in *Haemanthus* endosperm with chlorotetracycline. 87:23.
—, **Hepler, P. K., and Jackson, W. T.** Ionic changes in the mitotic apparatus at the metaphase/anaphase transition. 96:598.
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— *See* Parysek, Wolosewick, and Olmstead.
Woloski, B. M. *See* Fuller, Otto, Woloski, McGary, and Adams.
Wong, C. H., Pankhurst, C. E., Kondorosi, A., and Broughton, W. J. Morphology of root nodules and nodule-like structures formed by *Rhizobium* and *Agrobacterium* strains containing a *Rhizobium meliloti* megaplasmid. 97:787.
— *See* Broughton, Wong, Lewin, Samrey, Myint, Meyer, Dowling, and Simon.
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— *See* Rivera, Pasion, Wong, Fei, and Biswas.
Wong, L. M. *See* Kamboj, Wong, Lamb, and Siu.
Wong, M. K. K., and Gotlieb, A. I. The reorganization of microfilaments, centrosomes, and microtubules during in vitro small wound reendothelialization. 107:1777.
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Wood, I. *See* Gospodarowicz, Lepine, Massoglia, and Wood.
Wood, J. G., Wallace, R. W., Whitaker, J. N., and Cheung, W. Y. Immunocytochemical localization of calmodulin and a heat-labile calmodulin-binding protein ($CaM\text{-}BP_{80}$) in basal ganglia of mouse brain. 84:66.
— *See* Cheng, Byrd, Whitaker, and Wood.
Wood, J. S., and Hartwell, L. H. A dependent pathway of gene functions leading to chromosome segregation in *Saccharomyces cerevisiae*. 94:718.
Wood, L., and Kaplan, A. Transit of ex-mannosidase during its maturation in *Dictyostelium discoideum*. 101:2063.
Wood, P. A. *See* Wiser, Wood, Eaton, and Sheppard.
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— *See* Eldridge, Bunge, Bunge, and Wood.
Woodcock, C. L. *See* Di Padua Mathieu, Mura, Frado, Woodcock, and Stollar.
Woodcock, C. L. F. Nucleus-associated intermediate filaments from chicken erythrocytes. 85:881.
—, **Frado, L.-L. Y., and Rattner, J. B.** The higher order structure of chromatin: evidence for a helical ribbon arrangement. 99:42.
— *See* LaFond, Woodcock, Woodcock, Kundahl, and Lucas.
— *See* Smith, Spector, Woodcock, Ochs, and Bhorjee.
Woodcock, H. *See* LaFond, Woodcock, Woodcock, Kundahl, and Lucas.
Woodcock-Mitchell, J., Eichner, R., Nelson, W. G., and Sun, T.-T. Immunolocalization of keratin polypeptides in human epidermis using monoclonal antibodies. 95:580.
— *See* Low, Woodcock-Mitchell, Mitchell, Arnold, and Absher.
Wooden, S. K. *See* Resendez, Ting, Kim, Wooden, and Lee.
Woodman, P. G., and Edwardson, J. M. A cell-free assay for the insertion of a viral glycoprotein into the plasma membrane. 103:1829.
Woodruff, M. L., Theriot, J., and Burden, S. J. 300-kD subsynaptic protein copurifies with acetylcholine receptor-rich membranes and is concentrated at neuromuscular synapses. 104:939.
Woodrum, D. T., and Linck, R. W. Structural basis of motility in the microtubular axostyle: Implications for cytoplasmic microtubule structure and function. 87:404.
Woods, A., Höök, M., Kjellén, L, Smith, C. G., and Rees, D. A. Relationship of heparan sulfate proteoglycans to the cytoskeleton and extracellular matrix of cultured fibroblasts. 99:1743.
— *See* LaBaron, Esko, Woods, Johansson, and Höök.
Woods, C. M., Boyer, B., Vogt, P. K., and Lazarides, E. Control of erythroid differentiation: asynchronous expression of the anion transporter and the peripheral components of the membrane skeleton in AEV- and S13-transformed cells. 103:1789.
Woods, J. W., Doriaux, M., and Farquhar, M. G. Transferrin receptors recycle to *cis* and middle as well as *trans* Golgi cisternae in Ig-secreting myeloma cells. 103:277.
— *See* Kelly, Passaniti, Woods, Daiss, and Roth.
Woodward, M. P. *See* Bloodgood, Woodward, and Salomonsky.
Woodward, S. C. *See* Davidson, Klagsbrun, Hill, Buckley, Sullivan, Brewer, and Woodward.
Woodworth, R. C. *See* Besterman, Airhart, Woodworth, and Low.
Wooley, J. C. *See* Lothstein, Arenstorf, Chung, Walker, Wall, Wooley, and LeStourgeon.
Woolford, J. L., Jr. *See* Last and Woolford.
Woolheim, C. B. *See* Lew, Woolheim, Waldvogel, and Pozzan.
Worcel, A. *See* Kmiec and Worcel.
Wordeman, L., McDonald, K. L., and Cande, W. Z. The distribution of cytoplasmic microtubules throughout the cell cycle of the centric diatom *Stephanopysix turris*: their role in nuclear migration and positioning in the mitotic spindle during cytokinesis. 102:1688.
Woychik, N. A. *See* Richardson, Woychik, Ebert, Dimond, and Cardelli.
Wozniak, R. W., Bartnik, E., and Blobel, G. Primary structure analysis of an integral membrane glycoprotein of the nuclear pore. 108:2083.
Wrana, J. L., Maeno, M., Hawrylyshyn, B., Yao, K.-L., Domenicucci, C., and Sodek, J. Differential effects of transforming growth factor-β on the synthesis of extracellular matrix proteins by normal fetal rat calvarial bone cell populations. 106:915.
Wray, B. E. *See* LaRochelle, Wray, Sealock, and Froehner.
— *See* Sealock, Wray, and Froehner.
Wrenn, D. S. *See* Senior, Griffin, Mecham, Wrenn, Prasad, and Urry.
Wright, B. *See* Kilmartin, Wright, and Milstein.
Wright, D. A. *See* Adlakha, Sahasrabuddhe, Wright, and Rao.
— *See* Adlakha, Shipley, Zhao, Jones, Wright, Rao, and Sauer.
Wright, D. G. *See* Rothwell, Nath, and Wright.
Wright, G. C. *See* Farach-Carson, Carson, Collier, Lennarz, Park, and Wright.
Wright, J. *See* Wang and Wright.
Wright, R., Basson, M., D'Ari, L., and Rine, J. Increased amounts of HMG-CoA reductase induce karmellae: a proliferation of stacked membrane pairs surrounding the yeast nucleus. 107:101.
Wright, R. L., Chojnacki, B., and Jarvik, J. W. Abnormal basal body number, location, and orientation in a striated-fiber-defective mutant of *Chlamydomonas reinhardtii*. 96:1697.
—, **Salisbury, J., and Jarvik, J. W.** A nucleus/basal body connector in *Chlamydomonas reinhardtii* that may function in basal body localization or segregation. 101:1903.
— *See* Adams, Wright, and Jarvik.
— *See* Hoops, Wright, Jarvik, and Witman.
Wright, S. D., Licht, M. R., Craigmyle, L. S., and Silverstein, S. C. Communication between receptors for different ligands on a single cell: ligation of fibronectin receptors induces a reversible alteration in the function of complement receptors on cultured human monocytes. 99:336.
— *See* Cramer, Milks, Brontoli, Ojakian, Wright, and Showell.
— *See* Detmers, Wright, Olsen, Kimball, and Cohn.
— *See* McNeil, Swanson, Wright, Silverstein, and Taylor.
— *See* Nathan, Srimal, Farber, Sanchez, Kabbash, Asch, Gailit, and Wright.
Wright, T. C., Jr. *See* Castellot, Pukac, Caleb, Wright, and Karnovsky.
Wright, W. E. Control of differentiation in heteokaryons and hybrids involving differentiation-defective myoblast variants. 98:436.
— Induction of muscle genes in neural cells. 98:427.
— Synthesis of rat myosin light chains in heterokaryons formed between undifferentiated rat myoblasts and chick skeletal myocytes. 91:11.
— The amplified expression of factors regulating myogenesis in L6 myoblasts. 100:31.
—, **and Aronoff, J.** Regulation of rat myosin light-chain synthesis in heterokaryons between 5-bromodeoxyuridine-blocked rat myoblasts and differentiated chick myocytes. 96:1571.
Wright-Sandor, L. G., Reichlin, M., and Tobin, S. L. Alteration by heat shock and immunological characterization of *Drosophila* small nuclear ribonucleoproteins. 108:2007.
Wrobel, N. C. *See* Kuettner, Memoli, Pauli, Wrobel, Thonar, and Daniel.
Wu, C. *See* Pan, Teng, Wu, Adam, and Johnstone.
Wu, E. S. *See* Tank, Wu, and Webb.
Wu, H. C. *See* Gosh, Wellner, Cragoe, and Wu.
Wu, L., Rechsteiner, M., and Kuehl, L. Comparative studies on microinjected high-mobility-group chromosomal proteins, HMG1 and HMG2. 91:488.

Wu, L. H., Kuehl, L., and Rechsteiner, M. Dynamic behavior of histone H1 microinjected into HeLa cells. 103:465.
Wu, M. *See* Gerhart, Wu, and Kirschner.
Wu, N. W., Jalkanen, S., Streeter, P. R., and Butcher, E. C. Evolutionary conservation of tissue-specific lymphocyte-endothelial cell recognition mechanisms involved in lymphocyte homing. 107:1845.
Wu, R. S., Nishioka, D., and Bonner, W. M. Differential conservation of histone 2A variants between mammals and sea urchins. 93:426.
Wu, T.-C. *See* Wan, Wu, Chung, and Damjanov.
Wuestehube, L. J., and Luna, E. J. F-actin binds to the cytoplasmic surface of ponticulin, a 17-kD integral glycoprotein from *Dictyostelium discoideum* plasma membranes. 105:1741.
Wurster, B., and Butz, U. A study on sensing and adaptation in *Dictyostelium discoideum*: guanosine 3′, 5′-phosphate accumulation and light scattering responses. 96:1566.
— *See* Bumann, Wurster, and Malchow.
Wyche, J. H. *See* Johnson, Dawson, Turner, and Wyche.
Wylie, C. *See* Colman, Morser, Lane, Besley, Wylie, and Valle.
Wysolmerski, T. *See* Stidwill, Wysolmerski, and Burgess.

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Yaar, M. Palleroni, A. V., and Gilchrest, B. A. Normal human epidermis contains an interferon-like protein. 103:1349.
Yabkowitz, R., and Burgess, D. R. Low ionic strength solubility of myosin in sea urchin egg extracts is mediated by a myosin-binding protein. 105:927.
Yager, J. D., Jr. *See* Stanchfield and Yager.
Yahara, I., Harada, F., Sekita, S., Yoshihira, K., and Natori, S. Correlation between effects of 24 different cytochalasins on cellular structures and cellular events and those on actin in vitro. 92:69.
— *See* Iida and Yahara.
— *See* Matsuzaki, Matsumoto, and Yahara.
Yam, A. *See* Novikoff, La Russo, Novikoff, Stockert, Yam, and Le Sage.
Yamada, K. M., and Kennedy, D. W. Dualistic nature of adhesive protein function: fibronectin and its biologically active peptide fragments can autoinhibit fibronectin function. 99:29.
— *See* Akiyama, Yamada, Chen, and Yamada.
— *See* Akiyama, Yamada, and Yamada.
— *See* Boucat, Darribère, Poole, Aoyama, Yamada, and Thiery.
— *See* Chen, Hasegawa, Hasegawa, Weinstock, and Yamada.
— *See* Chen, Wang, Hasegawa, Yamada, and Yamada.
— *See* Duband, Nuckolls, Ishihara, Hasegawa, Yamada, Thiery, and Jacobson.
— *See* Duband, Rocher, Chen, Yamada, and Thiery.
— *See* Humphries, Akiyama, Komoriya, Olden, and Yamada.
— *See* Hynes and Yamada.
— *See* Nagata, Humphries, Olden, and Yamada.
— *See* Nagata, Saga, and Yamada.
— *See* Piotrowicz, Orchekowski, Nugent, Yamada, and Kunicki.
— *See* Rovasio, Delouvée, Yamada, Timpl, and Thiery.
— *See* Saga, Nagata, Chen, and Yamada.
— *See* Savagner, Imhof, Yamada, and Thiery.
— *See* Spiegel, Yamada, Hom, Moss, and Fishman.
Yamada, S. S. *See* Akiyama, Yamada, Chen, and Yamada.
— *See* Chen, Wang, Hasegawa, Yamada, and Yamada.
Yamada, Y. *See* Laurie, Horikoshi, Killen, Segui-Real, and Yamada.
Yamaguchi, M., Robson, R. M., and Stromer, M. H. Evidence for actin involvement in cardiac Z-lines and Z-line analogues. 96:435.
Yamaguchi, T. *See* Matsuda, Saito, Yamaguchi, Koseki, and Hayashi.
Yamaguchi, T. P. *See* Kelvin, Simard, Tai, Yamaguchi, and Connolly.
Yamamoto, A., Masaki, R., and Tashiro, Y. Is cytochrome P-450 transported from the endoplasmic reticulum to the Golgi apparatus in rat hepatocytes? 101:1733.
— *See* Masaki, Yamamoto, and Tashiro.
Yamamoto, K., and Fahimi, H. D. Three-dimensional reconstruction of a peroxisomal reticulum in regenerating rat liver: evidence of interconnection between heterogeneous segments. 105:713.
—, Pardee, J. D. Reidler, J., Stryer, L., and Spudich, J. A. Mechanism of interaction of *Dictyostelium* severin with actin filaments. 95:711.
— *See* Brown, Yamamoto, and Spudich.
Yamamoto, K. R. *See* Firestone, John, and Yamamoto.
Yamamoto, M., Steinbusch, H. W., and Jessell, T. M. Differentiated properties of identified serotonin neurons in dissociated cultures of embryonic rat brain stem. 91:142.
Yamamoto, S. *See* Sudo, Kodama, Amagai, Yamamoto, and Kasai.
Yamamoto, Y. *See* Kobayashi, Tsukita, Tsukita, Yamamoto, and Matsumoto.
Yamanaka, G. *See* Lundell, Yamanaka, and Glazer.
Yamashiro, C. T. *See* Rothman, Yamashiro, Raymond, Kane, and Stevens.
Yamashiro, D. J., Fluss, S. R., and Maxfield, F. R. Acidification of endocytic vesicles by an ATP-dependent proton pump. 97:929.
—, and Maxfield, F. R. Acidification of morphologically distinct endosomes in mutant and wild-type Chinese hamster ovary cells. 105:2723.
—, and Maxfield, F. R. Kinetics of endosome acidification in mutant and wild-type Chinese hamster ovary cells. 105:2713.
Yamashiro-Matsumura, S., and Matsumura, F. Characterization of 83-kD nonmuscle caldesmon from cultured rat cells: stimulation of actin binding of nonmuscle tropomyosin and periodic localization along microfilaments like tropomysoin. 106:1973.
—, and Matsumura, F. Intracellular localization of the 55-kD actin-bundling protein in cultured cells: spatial relationships with actin, alpha-actinin, tropomyosin, and fimbrin. 103:631.
— *See* Lin, Matsumura, and Yamashiro-Matsumura.
Yamin, M. A., and Tamm, S. L. ATP reactivation of the rotary axostyle in termite flagellates: effects of dynein ATPase inhibitors. 95:589.
Yanagida, M. *See* Adachi and Yanagida.
— *See* Hirano, Hiraoka, and Yanagida.
— *See* Hirano, Konoha, Toda, and Yanagida.
Yanagida, T. *See* Prochniewicz-Nakayama, Yanagida, and Oosawa.
Yanagimoto, K. C. *See* Fisher and Yanagimoto.
Yanagisawa, K. *See* Smith, D'Eugenio-Gumkowski, Yanagisawa, and Jamieson.
Yanagisawa, M. *See* Kanai, Takemura, Oshima, Mori, Ihara, Yanagisawa, Masaki, and Hirokawa.
Yanaihara, C. *See* Orci, Ravazzola, Amherdt, Yanaihara, Yanaihara, Halban, Renold, and Perrelet.
Yancey, S. B., John, S. A., Lal, R., Austin, B. J., and Revel, J.-P. The 43-kD polypeptide of heart gap junctions: immunolocalization, topology, and functional domains. 108:2241.
—, Koh, K., Chung, J., and Revel, J.-P. Expression of the gene for Main Intrinsic Polypeptide (MIP): separate spatial distribution of MIP and β-crystallin gene transcripts in rat lens development. 106:705.
— *See* Dermietzel, Yancey, Traub, Willecke, and Revel.
— *See* Meyer, Yancey, Revel, and Peskoff.
Yang, D. C. H. *See* Dang, Yang, and Pollard.
Yang, G. C. *See* Aszalos, Yang, and Gottesman.
Yang, H.-Y., Lieska, N., Goldman, A. E., and Goldman, R. D. A 300,000-mol-wt intermediate filament-associated protein in baby hamster kidney (BHK-21) cells. 100:620.
— *See* Jones, Goldman, Yang, and Goldman.
— *See* Lieska, Yang, and Goldman.
Yang, N. S., Kirkland, W., Jorgensen, T., and Furmanski, P. Absence of fibronectin and presence of plasminogen activator on both normal and malignant human mammary epithelial cells in culture. 84:120.
Yang, Y. W.-H. *See* Owens, Geisterfer, Yang, and Komoriya.
Yannariello-Brown, J., Wewer, U., Liotta, L., and Madri, J. A. Distribution of a 69-kD laminin-binding protein in aortic and microvascular endothelial cells: modulation during cell attachment, spreading, and migration. 106:1773.
Yao, K.-L. *See* Wrana, Maeno, Hawrylyshyn, Yao, Domenicucci, and Sodek.
Yao, M. C., Blackburn, E., and Gal, J. Tandemly repeated C-C-C-C-A-A hexanucleotide of *Tetrahymena* rDNA is present elsewhere in the genome and may be related to the alteration of the somatic genome. 90:515.
Yao, M.-C. Elimination of specific DNA sequences from the somatic nucleus of the ciliate *Tetrahymena*. 92:783.
Yao, Y.-M. M. *See* Nitkin, Smith, Magill, Fallon, Yao, Wallace, and McMahon.
Yarden, Y., Schreiber, A. B., and Schlessinger, J. A nonmitogenic analogue of epidermal growth factors induces early responses mediated by epidermal growth factor. 92:687.
Yario, T. *See* Steitz, Berg, Hendrick, La Branche-Chabot, Metspalu, Rinke, and Yario.
Yassin, R., Shefcyk, J., White, J. R., Tao, W., Volpi, M., Molski, T. F. P., Naccache, P. H., Feinstein, M. B., and Sha'afi, R. I. Effects of chemotactic factors and other agents on the amounts of actin and a 65,000-mol-wt protein associated with the cytoskeleton of rabbit and human neutrophils. 101:182.
— *See* Becker, Kermode, Naccache, Yassin, Marsh, Munoz, and Sha'afi.
— *See* Sha'afi, Shefcyk, Yassin, Molski, Volpi, Naccache, White, Feinstein, and Becker.
Yechiel, E., and Edidin, M. Micrometer-scale domains in fibroblast plasma membranes. 105:755.
Yednock, T. A., Butcher, E. C., Stoolman, L. M., and Rosen, S. D. Receptors involved in lymphocyte homing: relationship between a carbohydrate-binding receptor and the MEL-14 antigen. 104:725.

—, **Stodman, L. M., and Rosen, S. D.** Phosphomannosyl-derivatized beads detect a receptor involved in lymphocyte homing. 104:713.
Yee, G. H. *See* Hynes, Marcantonio, Stepp, Utry, and Yee.
Yeh, E. *See* Bloom, Amaya, Carbon, Clarke, Hill, and Yeh.
Yelick, P. C. *See* Mali, Sandberg, Vuorio, Yelick, Hecht, and Parvinen.
Yen, S.-H., and Fields, K. L. Antibodies to neurofilament, glial filament, and fibroblast intermediate filament proteins bind to different cell types of the nervous system. 88:115.
Yen, T. J. *See* Joshi, Yen, and Cleveland.
Yeoh, G. C. T. *See* Shelly, Tynan, Schmid, Schutz, and Yeoh.
Yeoman, L. C. *See* Bennett, Busch, Lischwe, and Yeoman.
— *See* Bennett, Spector, and Yeoman.
Yewdell, J. W. *See* Doms, Russ, and Yewdell.
Yguerabide, J. *See* Jesaitis and Yguerabide.
— *See* Woda, Yguerabide, and Feldman.
Yin, H. L., Albrecht, J. H., and Fattoum, A. Identification of gelsolin, a Ca^{2+}-dependent regulatory protein of actin gel-sol transformation, and its intracellular distribution in a variety of cells and tissues. 91:901.
—, **Iida, K., and Janmey, P. A.** Identification of a polyphosphoinositide-modulated domain in gelsolin which binds to the sides of actin filaments. 106:805.
— *See* Chaponnier, Janmey, and Yin.
— *See* Kwiatkowski, Janmey, and Yin.
— *See* Kwiatkowski, Mehl, and Yin.
— *See* Wang, Yin, Krueger, Caliguiri, and Tamm.
Yirinec, B. D. *See* Swanson, Yirinec, and Silverstein.
Yocum, R. R. *See* Barak, Yocum, and Webb.
Yokoo, K. M. *See* Jones, Yokoo, and Goldman.
Yokoyama, M. *See* Kusakabe, Yokoyama, Sakakura, Nomura, Hosick, and Nishizuka.
Yoon, K. *See* Noda, Yoon, Rodan, and Koppel.
Yoon, M. *See* Papasozomenos, Yoon, Crane, Autilio-Gambetti, and Gambetti.
Yorde, D. E. *See* Godfrey, Dietz, Morstad, Wallskog, and Yorde.
Yorifuji, H. *See* Hirokawa, Sobue, Kanda, Harada, and Yorifuji.
York, D. *See* Gething, Doms, York, and White.
Yoshida, K. *See* Nachmias, Yoshida, and Glennon.
Yoshida, T. *See* Ito, Tanaka, Yoshida, Onoda, Ohta, Hagiwara, Itoh, Ogura, Saito, and Hidaka.
— *See* Shimoyama, Yoshida, Terada, Shimosato, Abe, and Hirohashi.
Yoshida-Noro, C. *See* Ogou, Yoshida-Noro, and Takeichi.
Yoshihara, C. M. *See* Baldwin, Yoshihara, Blackmer, Kintner, and Burden.
Yoshihira, K. *See* Yahara, Harada, Sekita, Yoshihira, and Natori.
Yoshimura, A. *See* Ono, Mifune, Yoshimura, Ohnishi, and Kuwano.
Yoshino, J. *See* Tennekoon, Yoshino, Peden, Bigbee, Rutkowski, Kishimoto, DeVries, and McKhann.
Yoshino, J. E., Dinneen, M. P., Lewis, B. L., Meador-Woodruff, J. H., and DeVries, G. H. Differential proliferative responses of cultured Schwann cells to axolemma- and myelin-enriched fractions. I. Biochemical studies. 99:2309.
—, **Mason, P. W., and DeVries, G. H.** Developmental changes in myelin-induced proliferation of cultured Schwann cells. 104:655.
Yoshioka, T., and Somlyo, A. P. Calcium and magnesium contents and volume of the terminal cisternae in caffeine-treated skeletal muscle. 99:558.
— *See* Maruyama, Yoshioka, Higuchi, Ohashi, Kimura, and Natori.
Yost, B. *See* Flanagan, Yost, and Crawford.
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Young, E. F. *See* Ferguson, Young, Racymaekers, and Kranias.
Young, J.-I. *See* Liu, Young, and Elson.
Young, M. F. *See* Gehron Robey, Young, Fisher, and McClain.
— *See* Gehron Robey, Young, Flanders, Roche, Kondaiah, Reddi, Termine, Sporn, and Roberts.
Young, M. R. *See* Geisow, Hart, and Young.
Young, P. R., Hazuda, D. J., and Simon, P. L. Human interleukin 1β is not secreted from hamster fibroblasts when expressed constitutively from a transfected cDNA. 107:447.
Youngner, J. S. *See* Wilcox, Whitaker-Dowling, Youngner, and Widnell.
Yousef, I. M. *See* Phillips, Oda, Yousef, and Funatsu.
Ypey, D. L. *See* Ince, Coremans, Ypey, Leijh, Verveen, and van Furth.
— *See* Ince, Ypey, van Furth, and Verveen.
Yuan, L., Barriocanal, J. G., Bonifacino, J. S., and Sandoval, I. V. Two integral membrane proteins located in the *cis* -middle and *trans*-part of the Golgi system acquire sialylated N-linked carbohydrates and display different turnovers and sensitivity to cAMP-dependent phosphorylation. 105:215.
Yuan, L. C. *See* Chen, Bonifacino, Yuan, and Klausner.
Yumura, S., and Fukui, Y. Filopode-like projections induced with demethyl sulfoxide and their relevance to cellular polarity in *Dictyostelium*. 96:857.
—, **Mori, H., and Fukui, Y.** Localization of actin and myosin for the study of ameboid movement in *Dictyostelium* using improved immunofluorescence. 99:894.
Yun, K. *See* Scott, Hoerl, Willie, Florine, Krawisz, and Yun.
Yung, W. K. A. *See* Wang, Cairncross, Yung, Garber, and Liem.
Yurchenco, P. D., and Ruben, G. C. Basement membrane structure in situ: evidence for lateral associations in the type IV collagen network. 105:2559.
Yurcheno, P. D. *See* Charonis, Tsilibary, Yurcheno, and Furthmayr.
Yuspa, S. H., Kilkenny, A. E., Steinert, P. M., and Roop, D. R. Expression of murine epidermal differentiation markets is tightly regulated by restricted extracellular calcium concentrations in vitro. 109:1207.
— *See* Stanley and Yuspa.

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Zabin, I. *See* Bernabeu, Tobin, Fowler, Zabin, and Lake.
Zachary, I., Sinnett-Smith, J. W., and Rozengurt, E. Early events elicited by bombesin and structurally related peptides in quiescent Swiss 3T3 cells. I. Activation of protein kinase C and inhibition of epidermal growth factor binding. 102:2211.
Zackroff, R. V., Goldman, A. E., Jones, J. C. R., Steinert, P. M., and Goldman, R. D. Isolation and characterization of keratin-like proteins from cultured cells with fibroblastic morphology. 98:1231.
Zagon, I. S. *See* Riederer, Zagon, and Goodman.
Zagouras, P., and Rose, J. K. Carboxy-terminal SEKDEL sequences retard but do not retain two secretory proteins in the endoplasmic reticulum. 109:2633.
Zahler-Bentz, K. *See* Painter, Zahler-Bentz, and Dukes.
Zak, N. B. *See* Linsenmayer, Fitch, Schmid, Zak, Gibney, Sanderson, and Mayne.
Zak, R. *See* Kennedy, Kamel, Tambone, Vrbova, and Zak.
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Zalin, R. J. *See* Entwistle, Curtis, and Zalin.
— *See* Entwistle, Zalin, Bevan, and Warner.
— *See* Entwistle, Zalin, Warner, and Bevan.
Zambonin-Zallone, A. *See* Marchisio, Cirillo, Naldini, Primavera, Teti, and Zambonin-Zallone.
Zamen, J. *See* Lambotte, Falmagne, Capiau, Zamen, Ruysschaert, and Dirkx.
Zampighi, G., Corless, J. M., and Robertson, J. D. On gap junction structure. 86:190.
—, **Kreman, M., Ramón, F., Moreno, A. L., and Simon, S. A.** Structural characteristics of gap junctions. I. Channel number in coupled and uncoupled conditions. 106:1667.
—, **Kyte, J., and Freytag, W.** The structural organization of $(Na^+ + K^+)$-ATPase in purified membranes. 98:1851.
—, **Reynolds, J. A., and Watt, R. M.** Characterization of apoliopo-protein B from human serum low density lipoprotein in *n*-dodecyl octaethyleneglycol monoether: An electron microscope study. 87:555.
—, **Simon, S. A., Robertson, J. D., McIntosh, T. J., and Costello, M. J.** On the structural organization of isolated bovine lens fiber junctions. 93:175.
Zampighi, G. A., Hall, J. E., Ehring, G. R., and Simon, S. A. The structural organization and protein composition of lens fiber junctions. 108:2255.
Zaner, K. S., and Stossel, T. P. Some perspectives on the viscosity of actin filaments. 93:987.
—, **and Valbert, P. A.** Viscoelasticity of F-actin measured with magnetic microparticles. 109:2233.
Zanetti, M., Ratcliffe, A., and Watt, F. M. Two subpopulations of differentiated chondrocytes identified with a monoclonal antibody to keratan sulfate. 101:53.
Zanetti, N. C., and Solursh, M. Induction of chrondrogenesis in limb mesenchymal cultures by disruption of the actin cytoskeleton. 99:115.
— *See* Warner and Zanetti.
Zani, B. M. *See* Eusebi, Molinaro, and Zani.
Zanini, A., Giannattasio, G., Nussdorfer, G., Margolis, R. K., Margolis, R. U., and Meldolesi, J. Molecular organization of prolactin granules. II. Characterization of glycosaminoglycans and glycoproteins of bovine prolactin matrix. 86:260.
— *See* Fumagalli and Zanini.
— *See* Giannattasio, Zanini, Rosa, Meldolesi, Margolis, and Margolis.
— *See* Hashimoto, Fumagalli, Zanini, and Meldolesi.
— *See* Rosa, Fumagalli, Zanini, and Huttner.
— *See* Rosa, Hille, Lee, Zanini, DeCamilli, and Huttner.
— *See* Sher, Denis-Donini, Zanini, Bisiani, and Clementi.

Zannis-Hadjopoulos, M., Taylor, M. W., and Hand, R. Inhibition of DNA chain elongation in a purine-auxotrophic mutant of Chinese hamster. 85:777.
Zarandi, B. *See* Zs-Nagy, Lustyik, Zs-Nagy, Zarandi, and Bertoni-Freddari.
Zardi, L. *See* Borsi, Carnemolla, Castellani, Rosellini, Vecchio, Allemanni, Chang, Taylor-Papadimitriou, Pande, and Zardi.
— *See* Carnemolla, Balza, Siri, and Zardi.
— *See* Castellani, Siri, Rosellini, Infusini, Borsi, and Zardi.
— *See* Lewandowska, Choi, Rosenberg, Zardi, and Culp.
— *See* Mugnai, Lewandowska, Carnemolla, Zardi, and Culp.
Zaremba, S., and Keen, J. H. Assembly polypeptides from coated vesicles mediate reassembly of unique clathrin coats. 97:1339.
Zaruba, M. *See* Tennekoon, Zaruba, and Wolinsky.
Zavala, M. E., and Brandon, D. L. Localization of a phytohormone using immunocytochemistry. 97:1235.
Zavortink, M. *See* Saxton, Stemple, Leslie, Salmon, Zavortink, and McIntosh.
Zeigler, C. J. *See* Burmer, Zeigler, and Norwood.
Zeitlin, P. L., and Hubbard, A. L. Cell surface distribution and intra-cellular fate of asialoglycoproteins: a morphological and biochemical study of isolated rat hepatocytes and monolayer cultures. 92:634.
Zeitlin, S., Wilson, R. C., and Efstratiadis, A. Automomous splicing and complementation of in vivo–assembled spliceosomes. 108:765.
Zeller, R. *See* Mattaj, Lienhard, Zeller, and DeRobertis.
Zeltner, D. *See* Mannino, Ballmer, Zeltner, and Burger.
Zelus, B. D. *See* Giebelhaus, Zelus, Henchman, and Moon.
Zentgraf, H., and Franke, W. W. Differences of supranucleosomal organization in different kinds of chromatin: cell type-specific globular subunits containing different numbers of nucleosomes. 99:272.
— *See* Olins, Olins, Zentgraf, and Franke
Zern, M. A. *See* Czaja, Weiner, Flanders, Giambrone, Wind, Biempica, and Zern.
— *See* Saber, Shafritz, and Zern.
Zervos, A. S., Hope, J., and Evans, W. H. Preparation of a gap junction fraction from uteri of pregnant rats: the 28-kD polypeptides of uterus, liver, and heart gap junctions are homologous. 101:1363.
Zerwes, H. G., and Risau, W. Polarized secretion of a platelet-derived growth factor–like chemotactic factor by endothelial cells in vitro. 105:2037.
Zetter, B.-R. *See* Blood, Sasse, Brodt, and Zetter.
Zetter, B. R. *See* Netland and Zetter.
— *See* Voyta, Via, Butterfield, and Zetter.
Zeytinoglu, F. *See* Antakly, Pelletier, Zeytinoglu, and Labrie.
Zhang, J., and Nicholson, B. Sequence and tissue distribution of a second protein of hepatic gap junctions. Cx26, as deduced from its cDNA.
Zhang, L. *See* Fisher, Cui, Zhang, Hartman, Grahl, Guo-Yang, Tarpey, and Damsky.
Zhang, W. *See* Gossett, Zhang, and Olson.
Zhang, Y., Shafiq, S. A., and Baker, D. Detection of a ventricular-specific myosin heavy chain in adult and developing chicken heart. 102:1480.
Zhao, J.-Y. *See* Adlakha, Shipley, Zhao, Jones, Wright, Rao, and Sauer.
Zhu, Y. Y. *See* Hayward, Zhu, and Schwartz.
Zhuang, Y.-X. *See* Whitely, Glaser, Zhuang, and Cassel.
Zielinski, R. E., and Price, C. A. Synthesis of thylakoid membrane proteins by chloroplasts isolated from spinach. Cytochrome *b* 559 and P700-chlorophyll *a*-protein. 85:435.
— *See* Roberts, Zielinski, Schleicher, and Watterson.
Zieseniss, E., and Plattner, H. Synchronous exocytosis in *Paramecium* cells involves very rapid (≤1 s), reversible dephosporylation of a 65-kD phosphoprotein in exocytosis-competent strains. 101:2028.
Zieske, J. D., and Bernstein, I. A. Modification of cell surface glycoprotein: addition of fucosyl residues during epidermal differentiation. 95:626.
—, Bukusoglu, G., and Gipson, I. K. Enhancement of vinculin synthesis by migrating stratified squamous epithelium. 109:571.
Zieve, G. W., Heidemann, S. R., and McIntosh, J. R. Isolation and partial characterization of a cage of filaments that surrounds the mammalian mitotic spindle. 87:160.
— *See* Heidemann, Zieve, and McIntosh.
Ziff, E. B. *See* Leonard, Gorham, Cole, Greene, and Ziff.
Zigmond, S. *See* Daukas, Lauffenburger, and Zigmond.
Zigmond, S. H. Consequences of chemotactic peptide receptor modulation for leukocyte orientation. 88:644.
—, Levitsky, H. I., and Kreel, B. J. Cell polarity: an examination of its behavioral expression and its consequences for polymor-phonuclear leukocyte chemotaxis. 89:585.
—, Sullivan, S. J., and Lauffenburger, D. A. Kinetic analysis of chemotactic peptide receptor modulation. 92:34.
— *See* Carson, Weber, and Zigmond.
— *See* Daukas and Zigmond.
— *See* Slonczewski, Wilde, and Zigmond.
— *See* Southwick, Dabiri, Pashetto, and Zigmond.
— *See* Sullivan, Daukas, and Zigmond.
— *See* Sullivan and Zigmond.
— *See* Tranquillo, Lauffenburger, and Zigmond.
Zijderhand-Bleekemolen, J. *See* Geuze, Stoorvogel, Strous, Slot, Zijderhand-Bleekemolen, and Mellman.
Zijderhand-Bleekemolen, J. E., Schwartz, A. L., Slot, J. W., Strous, G. J., and Geuze, H. J. Ligand- and weak base-induced redistribution of asialoglycoprotein receptors in hepatoma cells. 104:1647.
— *See* Strous, Du Maine, Zijderhand-Bleekemolen, Slot, and Schwartz.
Zimbelmann, R. *See* Leube, Bader, Bosch, Zimbelmann, Achtstaetter, and Franke.
Zimmer, D. B., and Van Eldik, L. J. Analysis of the calcium-modulated proteins, S100 and calmodulin, and their target proteins during C6 glioma cell differentiation. 108:141.
Zimmer, F. J., Dreyer, C., and Hausen, P. The function of the nuclear envelope in nuclear protein accumulation. 106:1435.
Zimmer, K.-P. *See* Green, Zimmer, Griffiths, and Mellman.
Zimmerberg, J., Sardet, C., and Epel, D. Exocytosis of sea urchin egg cortical vesicles in vitro is retarded by hyperosmotic sucrose: kinetics of fusion monitored by quantitative light-scattering microscopy. 101:2398.
— *See* Chandler, Witaker, and Zimmerberg.
— *See* Cohen, Akabas, Zimmerberg, and Finkelstein.
— *See* Sarkar, Morris, Eidelman, Zimmerberg, and Blumenthal.
Zimmermann, A., Schaer, J.-C., Muller, D. E., Schneider, J., Miodonski-Maculewicz, N. M., and Schindler, R. Formation of mast cell granules in cell cycle mutants of an undifferentiated mastocytoma line: evidence for two different states of reversible proliferative quiescence. 96:1756.
Zimmermann, H.-P. *See* Granzow, Kopun, and Zimmermann.
Zimmermann, R. *See* Schmidt, Hennig, Zimmermann, and Neupert.
Ziomek, C. A., Schulman, S., and Edidin, M. Redistribution of membrane proteins in isolated mouse intestinal epithelial cells. 86:849.
— *See* Johnson and Ziomek.
— *See* Wolf and Ziomek.
Zirkin, B. R., Chang, T. S. K., and Heaps, J. Involvement of an acrosin-like proteinase in the sulfhydryl-induced degradation of rabbit sperm nuclear protamine. 85:116.
Zobel, C. R. *See* Eckert, Koons, Schantz, and Zobel.
Zoerkler, P. *See* Verrey, Schaerer, Zoerkler, Paccolat, Geering, Kraehenbuhl, and Rossier.
Zokas, L., and Glenney, J. R., Jr. The calpactin light chain is tighly linked to the cytoskeletal form of calpactin I: studies using monoclonal antibodies to calpactin subunits. 105:2111.
— *See* Glenney, Kindy, and Zokas.
— *See* Glenney and Zokas.
Zollinger, W. *See* Rougon, Dubois, Buckley, Magnani, and Zollinger.
Zorov, D. B. *See* Amchenkova, Bakeeva, Chentsov, Skulachev, and Zorov.
— *See* Severina, Skulachev, and Zorov.
Zs-Nagy, I., Lustyik, G., Zs-Nagy, V., Zarandi, B., and Bertoni-Freddari, C. Intracellular Na^+:K^+ in human cancer cells as revealed by energy dispersive x-ray microanalysis. 90:769.
Zs-Nagy, V. *See* Zs-Nagy, Lustyik, Zs-Nagy, Zarandi, and Bertoni-Freddari.
Zucker-Franklin, D. Endocytosis by human platelets: Metabolic and freeze-fracture studies. 91:706.
—, and Petursson, S. Thrombocytopoiesis—analysis by membrane tracer and freeze-fracture studies on fresh human and cultured mouse megakaryocytes. 99:390.
Zuckerman, S. H. *See* Linder, Zuckerman, and Ringertz.
Zuk, A., Matlin, K. S., and Hay, E. D. Type I collagen gel induces Madin-Darby canine kidney cells to become fusiform in shape and lose apical-basal polarity. 108:903.
Zuniga, M. *See* Edidin and Zuniga.
Zuniga, M. C., and Hood, L. E. Clonal variation in cell surface display of an H-2 protein lacking a cytoplasmic tail. 102:1.
Zúñiga, M. C. *See* Capps, Van Kampen, Ward, and Zúñiga.
Zweibaum, A. *See* Trugnan, Rousset, Chantret, Barbat, and Zweibaum.